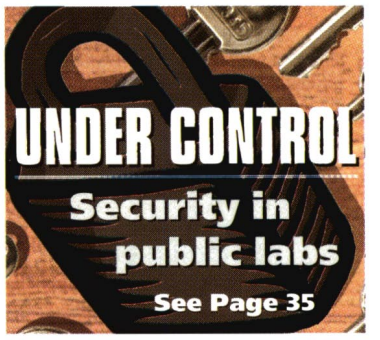
MacWEEK

02.12.96 | *The Newsweekly for Macintosh Managers* | VOLUME 10 NUMBER 6



Amelio rates top marks from industry insiders

By Jon Swartz

Turnaround specialist Gilbert Amelio worked his managerial magic at National Semiconductor Corp. and Rockwell International Corp., but can he use those same skills to help Apple?

Industry observers gave an emphatic thumbs up last week for Amelio, Apple's new CEO and chairman, and said they believe he is the person who can return the company to profitability and drive up its stock price to make any possible acquisition of Apple more attractive to stockholders.

However, Apple last week issued a statement refuting a new wave of published reports that it is in merger discussions "with any party." The company, which routinely refuses to comment on merger rumors, also said it ex-

See Amelio, Page 67

BILL ALBRECHT

Carl Franklin, an engineer for a NASA contractor at the Johnson Space Center, has led a user protest of the space center's forced migration to Windows machines.

NASA wing jettisons Macs; move fuels staff discontent

Users: 'Houston, we have a problem'

By Henry Norr

"Making me take a Pentium is like cutting off my right hand and sewing on a left hand," said a Mac user at NASA's Johnson Space Center in Houston who recently faced forced migration to Windows. "I'll learn to use the left hand, but there's no doubt my productivity is going to suffer, and I'm going to resent it."

To this engineer and hundreds of other Mac users at the space center, such desktop amputations hardly seem like an effective way to comply with agency administrator Dan Goldin's much-publicized motto, "Better, Faster, Cheaper." To them, the space center's new policy of standardiz-

See NASA, Page 68

NEWSPAPER SECOND CLASS

NEWS ANALYSIS

Drive vendors hit potholes, expect delays

By David Morgenstern

Continuing to pound each other in the removable storage market, Iomega Corp. and SyQuest Technology Inc. are finding a cold winter after their hype dreams. The pair are now facing difficulties in financing, product delays and corporate restructuring.

According to analysts, while the companies continue their bitter battles in both entry-level and high-performance markets, users will continue to see irregular shipments, delays and shortages of drives. The manufacturers are seeking allies to boost production and distribution, but thus far, these efforts have made little impact on availability.

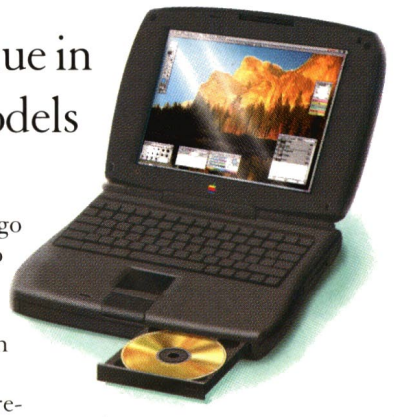
In the wake of negative first-quarter results, SyQuest this month said it will close one or more of its offshore plants, outsource products and lay off about 60 percent of its 2,600 employees, most holding jobs in SyQuest's manufacturing sites in Asia.

Also as part of the layoff, sources said the Fremont, Calif., company will eliminate most marketing and

See Storage, Page 68

PBs to get PCI, CD-ROM in '96

Reliability fixes due in Epic, Hooper models



By Joanna Pearlstein

After seeing its PowerBooks go from award-winning CPUs to poor-selling laptops, Apple hopes to re-energize the line by adding PCI and CD-ROM in 1996, sources said.

This summer's PowerBook release, code-named Epic (see 10.09.95, Page 1), will add a CD-ROM drive and mark the return of innovative design and reliability to PowerBooks, sources said. Then, late this year or early next year, the PCI bus will appear in a PowerBook line code-named Hooper.

Apple originally planned to release a revised PowerBook 5300 this spring, code-named Mustang; the revision would have included a 133-MHz PowerPC 603e and 256 Kbytes of Level 2 cache. But Apple has reportedly killed the project and is instead expanding plans for Epic.

First slated as a low-end notebook targeted primarily at education buyers, Epic is now expected to be available in several configurations for different markets and will include a Level 2 cache.

Sources said a CD-ROM-equipped, 133-MHz Epic model

See PowerBooks, Page 67

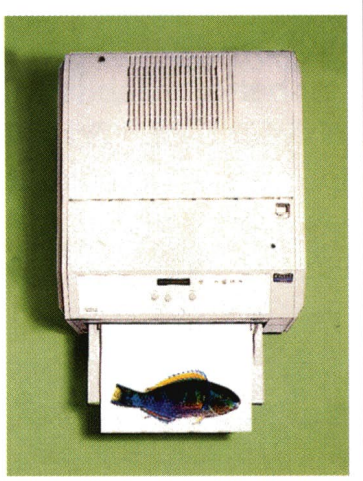
Shinko enters printer battle

By Kristin Balleisen

Shinko Technologies Inc. will try to increase its North American name recognition at this month's Seybold Seminars Boston 96 when it showcases its new PostScript dye-sublimation printers.

Due out by mid-March, the

See Shinko, Page 67



Shinko will try to mine the U.S. prepress market with ColorStream II.

New Illustrator plugs in, tunes up, branches out

REVIEW

By Ben Long

The latest upgrade to Adobe Illustrator is more than just an improvement to an existing piece of software. With Version 6, Adobe Systems Inc. shows that it realizes that no program is an island. Illustration and design jobs require you to move different types of image data from one application to another, and with this upgrade, Adobe has begun to blur the lines between application tasks.

The $595 program's biggest change is a new plug-in architecture that opens Illustrator up to a whole new generation of tools. You can now run Adobe Photoshop-compatible filters, and third-party developers can create plug-ins and palettes of their own. Better drag-and-drop support between Illustrator and Photoshop, some redesigned palettes, and a number of new tools help Illustrator catch up to

See Illustrator, Page 25

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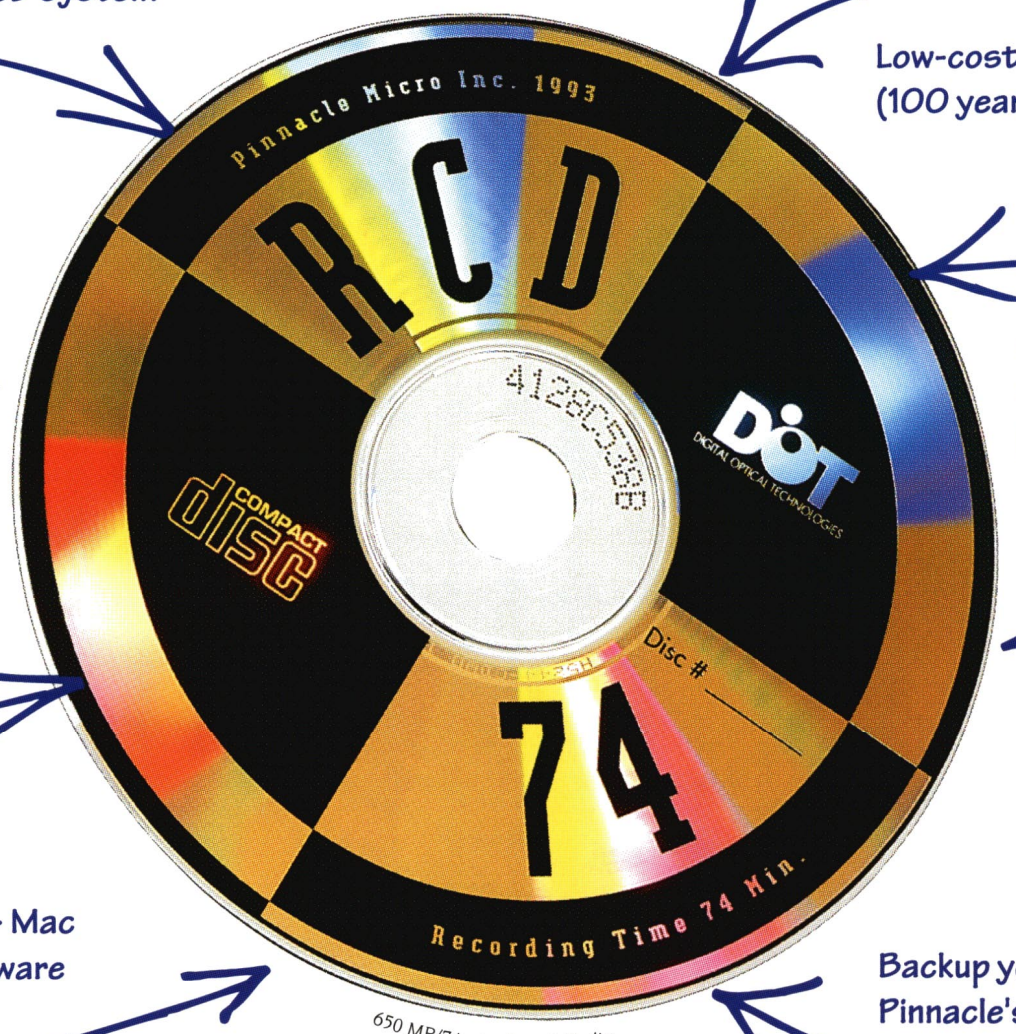

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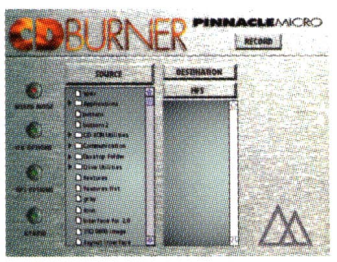

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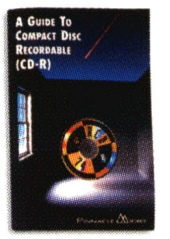

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MacWEEK

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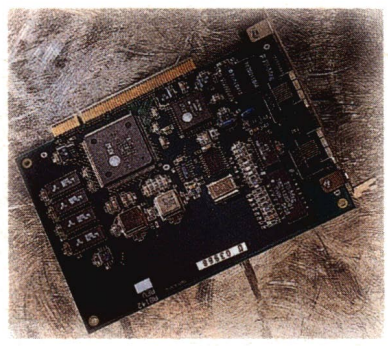
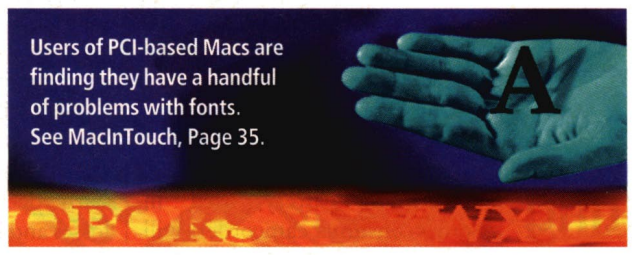
European vendors bringing boatload of ISDN PCI cards to U.S. shores • First 100VG card for Mac to ship • RoundTable to deliver text-based conferencing over the Internet

Fun, fun, fun: 3-D Fun Pack and Lens Pack exploit Ray Dream's new plug-in architecture. See GA, Page 12.



The first 100VG card for the Mac will hit the streets later this month. See Gateways, Page 16.



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MACWEEK INSIDER MATTHEW ROTHENBERG

Bringing it all back home

In light of all the Wagnerian contortions happening in Cupertino, my corner of MacWEEK — GA — seems like Switzerland: placid, happy and situated high above the blood baths that have made Apple's executive cadre look a little like they're reenacting the final scene of "Hamlet."

Honest: I feel for my colleagues going into scramble mode with each apocalyptic rumor of Apple's dark future. It's just that here, in the heartland of the Mac's installed base, we know we'll still be yodeling happily when the smoke clears.

So I'll leave the war correspondence to our shellshocked news and business writers and focus instead on a forum where Macs still stand leagues above the rest of the pack: this month's Seybold Seminars 96 in Boston.

You can bet whatever shape the Apple strudel finally takes, Macintosh users will still be calling the shots in publishing, both on paper and on-line, when the Seybold crowd masses for its annual Boston hoedown.

The rarefied atmosphere of the conference's parade of technology will feel like a cool Alpine breeze compared with the mercantile frenzy of January's Macworld Expo. Visitors to the Hynes Convention Center will be treated to the usual Swiss army knife arsenal of high-end pre-press tools, of course. Furthermore, with exhibitors like Agfa, a division of Bayer Corp.; Linotype-Hell Co.; and Scitex America Corp. eyeing both the high and low ends of the spectrum for the first time, both top-flight pre-press outfits and garden-variety desktop publishers will have reason to check out these digital heavyweights' booths.

Meanwhile, Shinko Technologies Inc. will become its own U.S. OEM when it delivers a full-bleed tabloid-size dye-sublimation printer bearing its own moniker (see story, Page 1).

Its quiver may be half-empty in some areas, but Apple's own shots at the graphics canton sound like they'll be on target. The company's new servers, expected to debut at the show, are aimed right at the heart of the publishing market.

Meanwhile, as the company's ColorSync technology moves out of its awkward adolescence, accessible color management may finally be coming into its own. Be on the lookout for enhancements to the Mac's spectrum of color solutions from such imaging superpowers as Eastman Kodak Co.

Whatever shape Apple takes, the Mac will still call the shots in publishing.

The Mac will also take the high road toward all-digital work flow, judging from the roster of speakers ready to declare independence from traditional proofing technologies. We'll have to wait and see if the electronic proof is in the pudding.

Vendors will jockey to discuss the Web — as in World Wide, not presses. At least 10 sessions at the show will spin Web scenarios and tout the industry's forays into Internet publishing. After all, it's only natural that the pre-eminent platform for paper publishing lead the way in putting ink on flowing electrons.

I can only hope that publishing pundits will also tackle a weak spot in the on-line toolbox: the lack of a coherent strategy for printing from the Web. Think the Internet has made print media obsolete? Just try printing from your favorite browser; if you can manage it at all, the results will look cheesier than a wedge of Emmenthaler.

But take heart, landsmen; rumor has it that Adobe Systems Inc. will be riding to the rescue with PostScript technology that will clean up those annoying artifacts. In any case, linking the Internet to your output device should be a top priority among the pre-press mavens at the show.

Whatever your pleasure, platform partisans will be gratified to see the Mac at the center of all these innovations. In fact, I'm sure I'll have to keep reminding myself that Seybold is a cross-platform show, just the way Intel-standard PC aficionados at Comdex should keep reminding themselves that there is an OS alternative to the Microsoft brand. □

Matthew Rothenberg, senior associate editor/GA, can be reached at matthew_rothenberg@macweek.com.

MacWEEK (ISSN 0892-8118) is published weekly, with the exception of Jan. 1, July 1, Sept. 2, and Dec. 23 and 30, by Ziff-Davis Publishing Co., 1 Park Ave., New York, N.Y. 10016. Single-copy price, including postage: $6. One-year subscription rate: U.S., $125; Canada/Mexico, U.S. $225; International, U.S. $350 (airmail). All orders must be prepaid. Direct **subscription inquiries** to Customer Service Department, MacWEEK, c/o JCI, P.O. Box 10634, Riverton, N.J. 08076-0634; (609) 786-8230. **Changes of address** require that a new application be filled out completely and include both new and old addresses. Allow four to six weeks for processing. We periodically make lists of our customers available to carefully screened mailers of quality goods and services. If you do not wish to receive such mailings, please let us know by writing to us at Customer Service Department, MacWEEK, P.O. Box 10634, Riverton, N.J. 08076-0634. **Postmaster:** Send address changes to MacWEEK, P.O. Box 10634, Riverton, N.J. 08076-0634. Second-class postage paid at New York and additional mailing offices. Printed in U.S.A. Canada Post International Publications Mail Product (Canadian Distribution) Sales Agreement No. 410667. Canadian GST registration number is R140496720.

Sony shooting for niche

Camera targeted at business users

By Kelly Ryer

Consumer products giant Sony Electronics Inc. hopes to capture business users with its next digital camera.

Sony will announce the DKC-ID1 next week and plans to ship the camera this summer. Pricing will probably be less than $2,000.

The new camera's CCD (charge-coupled device) will capture images at resolutions of 768 by 576 pixels in 24-bit color. Images will be JPEG-compressed at a ratio of 5-to-1 and stored on a standard Type II PC Card.

With the DKC-ID1's electronic shutter, Sony aims to minimize the number of moving parts.

Sony said that the one-pass DKC-ID1 will have a progressive scanner, which captures each line in sequence. New pictures can be taken after a delay of one-half to one second. An electronic shutter will reduce the need for mechanical parts and can operate at speeds ranging from 1/50th to 1/4,000th of a second.

According to Sony, a built-in 12x zoom lens will provide magnification equivalent to a 38mm to 460mm zoom on a traditional 35mm camera. The zoom lens can be operated both manually and automatically. The camera's electronic viewfinder will eliminate the weight of a traditional optical viewfinder and can display a small version of an image after capture, Sony said.

The DKC-ID1 will connect to a Mac through a SCSI-2 interface to download stored images. A lithium-ion battery used in Sony's consumer camcorders will power the camera.

Sony Electronics Inc. of Montvale, N.J., can be reached at (201) 930-1000 or (800) 635-7669; fax (800) 766-9022. □

Microsoft casts net for Apple employees

By Jon Swartz

Microsoft Corp. is attempting to gain from Apple's losses.

The Redmond, Wash.-based software giant this month sent scores of faxes to job-recruitment agencies in Silicon Valley and elsewhere in hopes of pinpointing recently laid-off Apple employees or those ready to bolt from the beleaguered company.

"Microsoft is swooping in like a vulture ready to pick at Apple's carcass," said one San Francisco-based recruiter who received the one-page fax. "I guess they want to take advantage while Apple is cutting staff and the company is in disarray. It's pretty blatant stuff."

Apple has laid off 1,300 employees and is expected to pare another 1,000 jobs as it struggles with declining market share, losses and internal strife.

Microsoft is wasting no time trying to pick up talent from its longtime high-tech rival, according to the memo obtained by MacWEEK.

"As I'm sure you are aware, Apple is currently facing some critical business challenges," the fax starts. "As a result, some Apple employees may be considering strategies for a career move. ...

"If you currently have Apple candidates that might be interested in Microsoft, and whose background and interests generally match the enclosed job descriptions, send them our way! ... We will guarantee feedback for each candidate within five days."

A Microsoft spokeswoman said the recruitment effort was "normal operating procedure." □

Netscape Navigator 2.0 graduates from beta testing

By James Staten

Netscape Communications Corp.'s Web browser, Navigator 2.0, is now officially shipping.

The upgrade provides more robust Usenet newsgroup and e-mail clients, and it introduces a new plug-in architecture that allows third-party companies to easily extend the browser's functions.

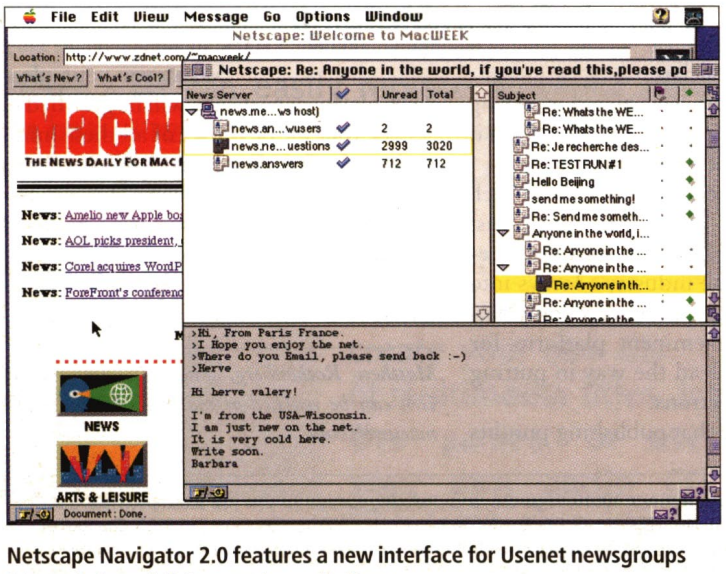
Navigator 2.0 also lets users see new visual presentation features, including frames, which allow Webmasters to display multiple pages or portions of pages in separate scrollable windows within the main window.

The upgrade supports new HTML tags for text alignment; superscript and subscript; and client-side image mapping, which speeds access to specific URLs (uniform resource locators).

Navigator 2.0 for Windows supports Sun Microsystems Inc.'s Java programming language. Java for the Mac is now scheduled to ship this month; Netscape plans to have a Java-enabled version of its Mac browser available in March.

Version 2.0, $49, can be bought at http://home.netscape.com.

Netscape Communications Corp. of Mountain View, Calif., is at (415) 528-2555; fax (415) 528-4140; info@netscape.com. □



Netscape Navigator 2.0 features a new interface for Usenet newsgroups (shown) plus a full-featured e-mail client.

PowerTap taps speed

By David Morgenstern

Providing developers with added means to boost speeds, Emerson Kennedy recently released a multiple-processor update to PowerTap, its distributed processing API.

Version 3.0 of the PowerTap library supports DayStar Digital Inc.'s nPower system extension used in the Genesis MP line of Mac clones and in accelerator cards from Total Impact (see story, right). The software lets applications distribute tasks automatically among both single- and multiple-processor systems on a network.

Emerson said the API offers the nPower architecture support as well as the networking, communications and task-scheduling routines needed for distributed processing. PowerTap uses a control panel on each remote machine that lets each user allocate how much processing power it will offer to distributed tasks. A system comprising 10 CPUs provides about eight times the performance of a single machine, depending on the task, Emerson said.

"[PowerTap] is completely transparent," said Greg Brown, a programmer with Orphan Technologies Inc. in Ottawa, Ill. He said he looked forward to adding multiprocessor support on top of distributed processing for StereopsysVR, a computation-intensive program that models 3-D images from stereographic photographs.

Emerson said programmers must divide data into task and job blocks for distributed processing over a network; this is not required for stand-alone multiprocessor systems.

The API costs $1,200, $1,900 or $2,700 for two, five or unlimited remote machines, respectively; the update is free for users of previous versions.

Emerson Kennedy of Redmond, Wash., can be reached at (206) 865-0420 or (800) 297-3888; fax (206) 865-8133; powertap@aol.com. □

Four chips stoke Total PowerSMP

By Carolyn Said

Packing multiple PowerPC chips, Total Impact's new PCI accelerator made its debut last week .

Total PowerSMP, which is due in March, comes with one, two or four PowerPC 604 processors. Users can order the board with chips running at 100 , 120 , 133 or 150 MHz. The card will include a 512-Kbyte on-board cache. Although it does not come with RAM, it will accommodate up to 1 Gbyte of memory, Total Impact said.

The card will come with Total FreedomSMP symmetric multiprocessing software libraries. Total Impact said several 3-D companies are revising their software to work directly with Total FreedomSMP. In addition, the card will support the nPower multiprocessing architecture developed by DayStar Digital Inc. and endorsed by Apple. Several developers have revised their computation-intensive software to support nPower.

Cards with 100-MHz chips will be $1,600, $2,300 or $3,800 for one-, two- or four-chip configurations, respectively. Cards with 150-MHz chips will be $2,200, $3,200 or $5,800.

Total Impact of Camarillo, Calif., can be reached at (805) 987-8704; fax (805) 484-9469; power@totalimpact.com; http://totalimpact.com. □

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All document systems great and small

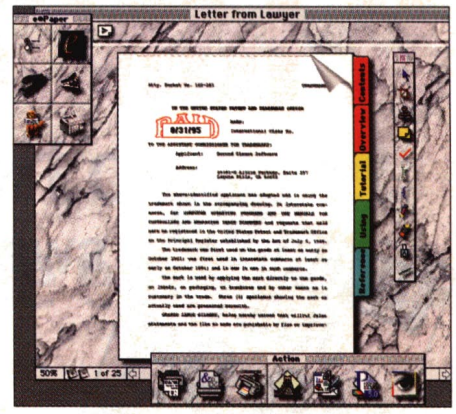
By Matthew Rothenberg

New products from Second Glance Software and Blueridge Technologies Inc. will cover the high and low ends of document-image management.

▶ **Second Glance** recently took the wraps off e•Paper, a new Macintosh-based suite of document-scanning and archiving software. Due in the first quarter for $169, e•Paper will help users capture documents from their scanners, convert them into editable text and index them.

The software includes Xerox Corp.'s TextBridge OCR application (see 01.15.96, Page 4). It will also feature a markup application that combines a format-sensitive text editor with annotation tools, such as sticky notes and a highlighter.

The suite's indexing component will store text information and a thumbnail image of each file; e•Paper users will be able to search for files by name, date, keyword, annotations or contents, Second Glance said.



The Action palette in Second Glance's e•Paper suite lets users route documents to third-party programs as well as fax machines and printers.

The package will also include a palette that gives users easy access to fax machines, printers and e-mail applications.

▶ **Blueridge Technologies** in January unveiled two new components for its cross-platform Optix document servers. Optix-WEB, due to ship in the first quarter, lets users of Web browsers perform searches or natural-language text queries on Optix document-image databases on a Web site.

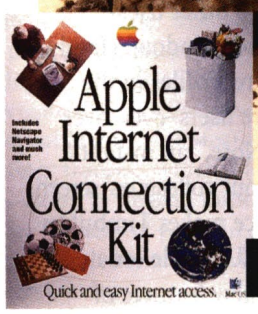
Optix DB Publisher is slated to ship in the third quarter. According to Blueridge, Optix DB Publisher will let users create a selected subset of a document database for electronic distribution on CD-ROMs. In addition to publishing, the software is aimed at mobile uses such as legal applications. Optix said DB Publisher supports most document formats, including document images, word processing files and spreadsheets.

The company has not set pricing for either product. An Optix system starts at about $100,000 for server software for Unix workstations, Mac and Windows clients, and training and support.

Second Glance Software of Bremerton, Wash., is at (360) 692-3694; fax (360) 692-9241; info@secondglance.com.

Blueridge Technologies Inc. of Flint Hill, Va.,can be reached at (540) 675-3015; fax (540) 675-3130; optix@blueridge.com; http://www.blueridge.com. □

Until now, the on-ramps to the Internet have been under construction.



Introducing the Apple Internet Connection Kit.

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Just think, 30 minutes after opening the box, you could be participating in discussion groups, E-mailing Aunt Helga in Denmark, visiting the Louvre, the Library of Congress or maybe even the local chicken joint. (Seems like everybody's got a Web site nowadays.) Visit your Apple reseller, or order direct by calling **1-800-950-5382 ext. 784.** And when you do get on the Net, check out our Web site at http://www.apple.com. Apple. The power to be your best.

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NETSCAPE

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MDI eyes 2.6-Gbyte MO

Micro Design International Inc. this month will release a new high-capacity model in its SCSI Express line of magneto-optical drives.

The $3,195 SE2600S handles ISO-standard 2.6-Gbyte, 5.25-inch MO cartridges, as well as older 1.3-Gbyte and 650-Mbyte media. MDI said the 3,600-rpm drive offers a sustained data transfer rate between 2 and 4 Mbytes per second.

In addition, the company said it will offer the drive in its line of MO jukeboxes in the first quarter of this year. The systems will offer capacities from 41 to 332 Gbytes and cost from $6,995 to $46,400, respectively.

Micro Design International Inc. of Winter Park, Fla., can be reached at (407) 677-8333 or (800) 228-0891; fax (407) 677-8365; info@microdes.com. □

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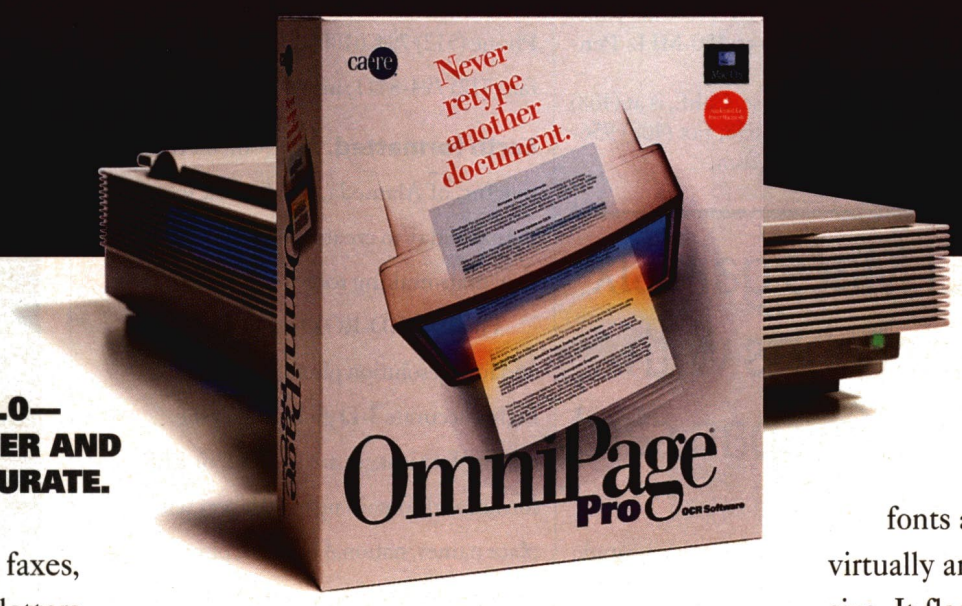

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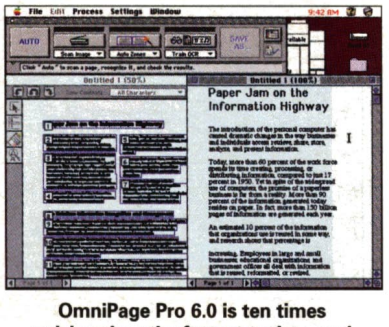

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Reply lets 8100 be PC

Simultaneous IP links with network pack

By David Morgenstern

Offering users of some early Power Macs a nook for Windows programs, Reply Corp. this month will release new models in its line of Intel-standard processor cards.

The new DOS on Power Mac cards work in Power Mac 8100 models; versions for the Power Mac 7100 line shipped in November (see 08.07.95, Page 8). The processor direct slot cards come with either a Cyrix 486 DX2/66, 486 DX2/100 or 5x86/100 processor and cost $695, $795 and $895, respectively.

Similar to the 7100 versions, the new cards will support 24-bit Super VGA graphics at a 640-by-480-pixel resolution. While the 7100 cards can share motherboard RAM, the 8100 versions require dedicated memory on the card, Reply said. The cards do not come with on-board RAM, but users can add up to 64 Mbytes.

Users can add serial and parallel ports with a $150 SoundBlaster daughtercard; Ethernet and token-ring support cost an additional $50 each.

In addition, Reply this month will offer a $195 Network Pac for its DOS on Mac and DOS on Power Mac cards as well as Apple's 6100 DOS Compatibility card. The software package includes support for Ethernet and token-ring networks. Reply said the software will enable simultaneous Mac and Intel-standard PC TCP/IP connections.

In other news, the company said it will offer DOS cards for PCI Macs in June. The cards will sport up to 150-MHz Pentium processors.

Reply Corp. of San Jose, Calif., is at (408) 942-4804 or (800) 801-6898; fax (408) 956-2793; http://www.reply.com. □

Server apps for CD-ROMs

By David Morgenstern

A pair of vendors are beefing up support for networked CD-ROM jukeboxes and servers. Astarte GmbH next week will release Miles Apart, server software for CD-ROM drives and changers, while Logicraft Information Systems Inc. this month shipped a client for its high-performance LanCD 3.2 CD-ROM servers.

Miles Apart will let networked users mount CD-ROM volumes via the Chooser and present all discs in a jukebox as a single directory on the desktop. The system will not require proprietary client software or drivers and will handle ISO 9660, Photo CD, audio and video CD formats, Astarte said.

The software supports devices using Nakamichi America Corp.'s seven-disc MBR-7 mechanism and NSM Jukebox GmbH's 100XA and Mercury changers that take 100 and 150 discs, respectively. According to Astarte, the server's caching algorithms will ease disc-swapping slowdowns and offer performance similar to ordinary hard disk server volumes.

The server costs $999 for unlimited users with the Nakamichi changer and $4,600 for unlimited users with the 150-disc NSM jukebox.

Logicraft's LanCD 3.2 client supports Hierarchical File System, CD-ROM XA and 9660 formats and handles long file names automatically. It requires System 7.1 or higher and MacTCP.

The Mac client costs $695 for a 10-user license; it is $995 for 50 users. A 12-drive LanCD server model with 100-disc jukebox and 4-Gbyte hard drive costs $30,900.

Astarte GmbH of St. Paul, Minn., can be reached at (612) 483-5338; fax (612) 483-5448; http://www.astarte.de/.

Logicraft Information Systems Inc. of Nashua, N.H., can be reached at (603) 880-0300 or (800) 880-5644; fax (603) 880-7229; http://www.logicraft.com. □

PCI Macs gain six serial ports with new Keyspan card

By James Staten

Power Mac users willing to trade a single PCI slot for half a dozen serial ports may want to pick up Keyspan's latest offering.

The company in January shipped the $539 Smart Serial 6 PCI card, which lets users connect up to six additional serial devices to their Power Mac; the two built-in serial ports remain fully accessible.

The 32-bit Smart Serial 6 has an aggregate data rate of 8 Mbps, Keyspan said. Using the RS-232 interface, this bandwidth translates into maximum simultaneous throughput of 115.2 Kbps for the first four ports and 57.6 Kbps in the last two.

The company said a free update due next week will support the Communications Toolbox and the RS-422 standard. An additional collection of drivers, slated for release later this year, will add support for several serial standards, including V.35. The forthcoming V.35 driver will allow throughput of up to 5 Mbps on either of the first two ports.

Keyspan is aiming the Smart Serial 6 for high-bandwidth telecommunications uses. The company said the current release does not work with peripherals that have their own proprietary drivers or rely on AppleTalk or GeoPort.

Keyspan, a division of InnoSys Inc. of Richmond, Calif., can be reached at (510) 222-0131; fax (510) 222-0323; info@keyspan.com; http://www.keyspan.com. □

Science & Tech Beat

Analysis, your way. National Instruments Corp. of Austin, Texas, will upgrade its $1,995 LabView virtual instrument programming software this quarter.

Version 4.0 will integrate new debugging and graphical programming tools and let users customize their work spaces. More than 30 new pre-built virtual instruments will be added to provide linear-algebra, statistical and interpolation analysis. Users can port their Mac applications to a variety of other platforms. Phone (512) 794-0100 or (800) 433-3488; fax (512) 794-8411; info@natinst.com.

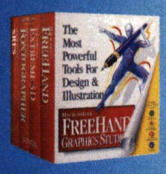
Earth formatted. Andromeda Interactive Inc. of Alameda, Calif., took more than one day to create Terra Forma, its new map-making tool.

The $995 CD-ROM contains 83 high- and low-resolution photographs of a highly accurate 3-D globe. All of the royalty-free images are in TIFF or EPS format and contain up to 80 layers with place names, national borders, physical features and vegetation patterns that can be added or removed. Terra Forma requires up to 40 Mbytes of RAM to view the high-resolution images. Phone (510) 769-1616; fax (510) 769-1919; androm@netcom.com.

CAMeo appearances. Bringing computer-aided manufacturing capabilities to its Power Draw and PowerCADD architectural-drawing and mechanical-engineering applications, Engineered Software of Greensboro, N.C., recently released Advanced Engineering Tools, a package of plug-ins.

The $189 software provides more than 20 tools for use with computer-numerically controlled machines, including tangent line and arc, S-blend, and offset. Phone (910) 299-4843; fax (910) 852-2067; engsw@aol.com

— By Kelly Ryer



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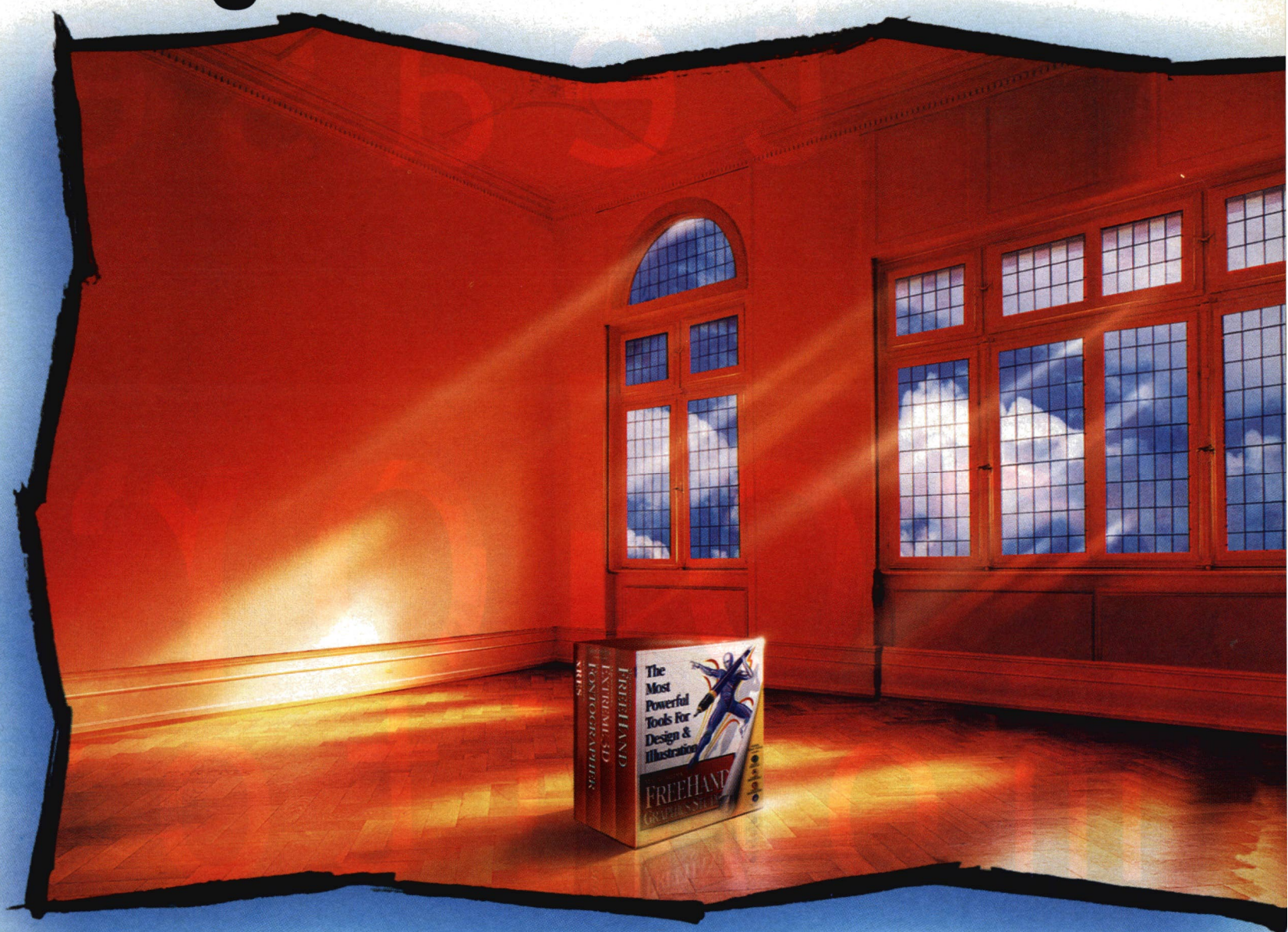

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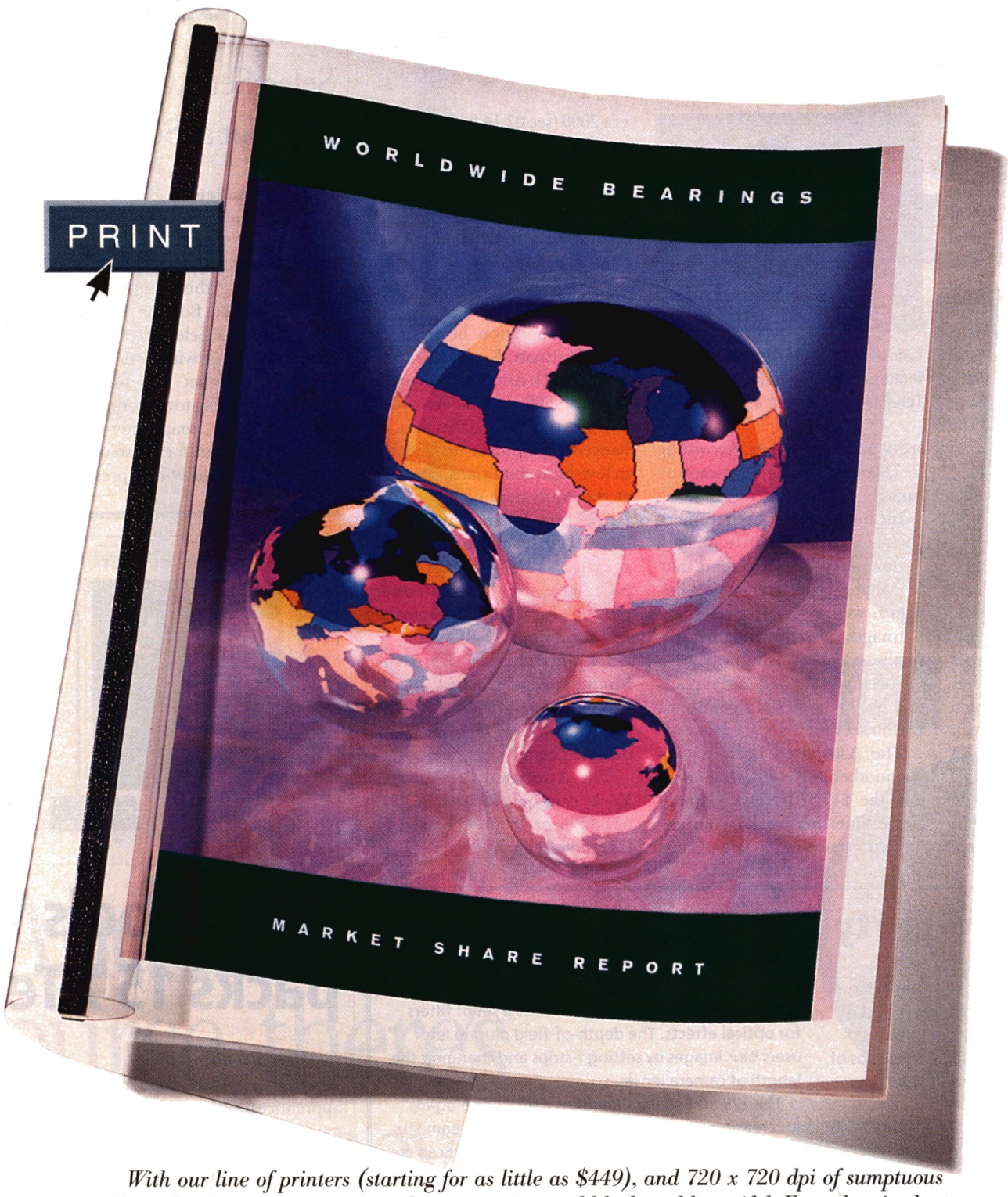

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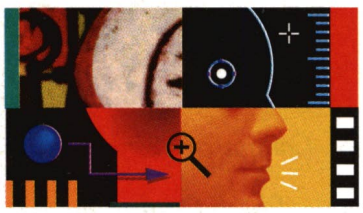


GA

GOING TO EXTREMES

Macromedia Inc. last week shipped Extreme 3D, its cross-platform 3-D graphics application.

Digital cameras focus on two market niches

By Kelly Ryer

Two more contestants are entering the crowded digital camera race, each targeting a specific area. Dicomed Inc. is angling for photo professionals who need high-quality images, while The Associated Press is focusing on photojournalists.

Dicomed recently shipped its BigShot camera backs. Originally planned as a single design (see 06.26.95, Page 14), the BigShot now comes in two models, the BigShot 4000 and 3000.

Both camera backs are designed for the Hasselblad 553ELX camera body, and both have a 6-by-6-centimeter CCD (charge-coupled device) with a resolution of 4,096 by 4,096 pixels. This is the highest-resolution CCD now available, according to Dicomed.

The $54,900 BigShot 4000 uses a Liquid Crystal Tunable Filter (LCTF) in front of the lens, which rapidly cycles to capture red, green and blue color information during a single-flash exposure.

The BigShot 3000, priced at $39,900, uses the same LCTF but captures color information in three sequential flash bursts. According to Dicomed, total image-capture time is less than 10 seconds.

Both models of the Dicomed BigShot feature a removable Liquid Crystal Tunable Filter in front of the lens.

In color mode, both camera backs capture 48-Mbyte images; users can remove the filter to take 16-Mbyte black-and-white images as well.

Images are downloaded directly to a Mac using a SCSI-3 connector. Dicomed said it plans to ship a Windows NT connector within six months.

The Associated Press is taking another angle. Its latest offering, the $15,520 News Camera 2000e, due this week, is an enhanced version of its News Camera 2000 (see 02.14.94, Page 26).

The NC 2000e digital camera has 16 Mbytes of internal memory, allowing its CCD to capture fast-moving subjects 12 images at a time, in a burst mode of 2.25 frames per second. Each 36-bit image is 1,024 by 1,280 pixels and 3.75 Mbytes in size.

A collaboration between AP and Eastman Kodak Co., the camera back comes mounted on a Nikon N905 camera. According to AP, the NC 2000e has enhanced capabilities for shooting in low-light conditions, operating at the equivalent of 200 to 1600 ASA. Images are stored on a Type III PC Card; up to 123 images fit on a 170-Mbyte card. The NC 2000e ships with a custom plug-in for Adobe Photoshop and a training CD-ROM.

Dicomed Inc. of Burnsville, Minn., can be reached at (612) 895-3000 or (800) 888-7979; fax (612) 895-3258 http://www.dicomed.com.

The Associated Press of New York can be reached at (212) 621-1596 or (800) 453-8883, fax (212) 506-6110. □

Agfa revs capstans, intros imagesetter

SelectSet Avantra to debut at Seybold

By Kristin Balleisen

Agfa will showcase a new four-up imagesetter and the high-end model of the company's enhanced capstan line at this month's Seybold Seminars in Boston.

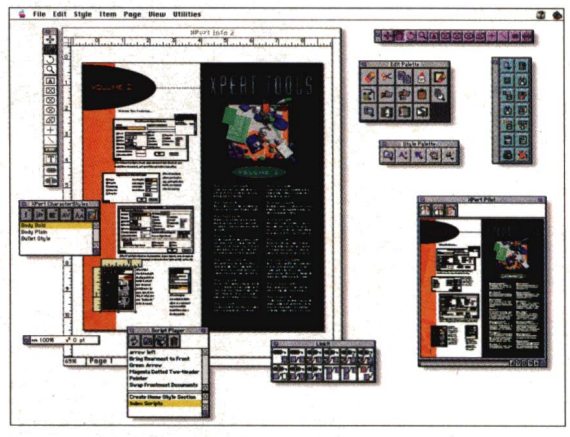
The $130,000 SelectSet Avantra 30, due by spring, will feature a 30-by-25-inch format for four-up presses. According to the company, the new drum imagesetter will provide a medium-format solution targeted at users of 29-inch presses.

The device will output resolutions from 1,200 to 3,600 dpi. Agfa said the Avantra 30 will image eight films consecutively, with a repeatability rate of 0.2 mils.

The Avantra 30 incorporates a new, 30,000-rpm motor that can output more than 30 flats per hour at 1,200 dpi; it will support screens at more than 500 lines per inch, Agfa said.

The imagesetter will support Agfa Balanced Screening up to 425 lpi and the company's optional CristalRaster stochastic screening technology at up to 600 lpi; CristalRaster is $15,000.

See Agfa, Page 14



Packing QuarkXPress full of new features, the 15 XTensions in XPert Tools Volume II address such aspects as character styles, text linking, applying styles and scripting.

XPert Tools Volume II packs 15 XTensions

By Matthew Rothenberg

The Carlsbad, Calif.-based a lowly apprentice production Inc. has upgraded its lineup of QuarkXTensions with new versions of its XPert Tools and ShadowCaster packages. Both packages are distributed by XChange Publishing Systems International.

XPert Tools Volume II comprises 15 XTensions that add new capabilities to the page-layout program from Denver-based Quark Inc.

- **XPert TextLink** lets users link multiple text boxes containing text or break all links while leaving text in place.
- **XPert CharacterStyles** lets users create character-based style sheets for XPress documents and apply character attributes from a floating palette.
- **XPert TextStyler** simplifies applying paragraph- or character-level styles.
- **XPert TextScale/Shift** allows users to alter horizontal and vertical scale and baseline shift from a palette.
- **XPert BoxTools** can convert text boxes into picture boxes, resize a box to a picture and create different indents for all four sides of a text box.

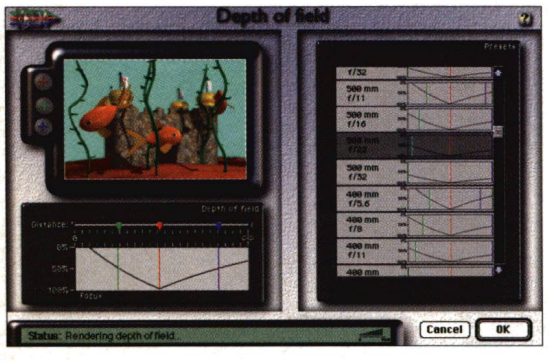
See XPert, Page 14

Ray Dream third-party plug-ins come true

By Kelly Ryer

In a new twist on its 3-D capabilities, Ray Dream Inc.'s Ray Dream Studio recently joined the growing list of applications that support third-party plug-ins.

Paris-based RAYflect Inc. has created two groups of plug-ins: the 3D Fun Pack and the Professional Lens Pack, both slated to ship this month from Ray Dream.



The Depth of Field plug-in to Ray Dream can render 3-D images with specific focal planes for out-of-focus effects.

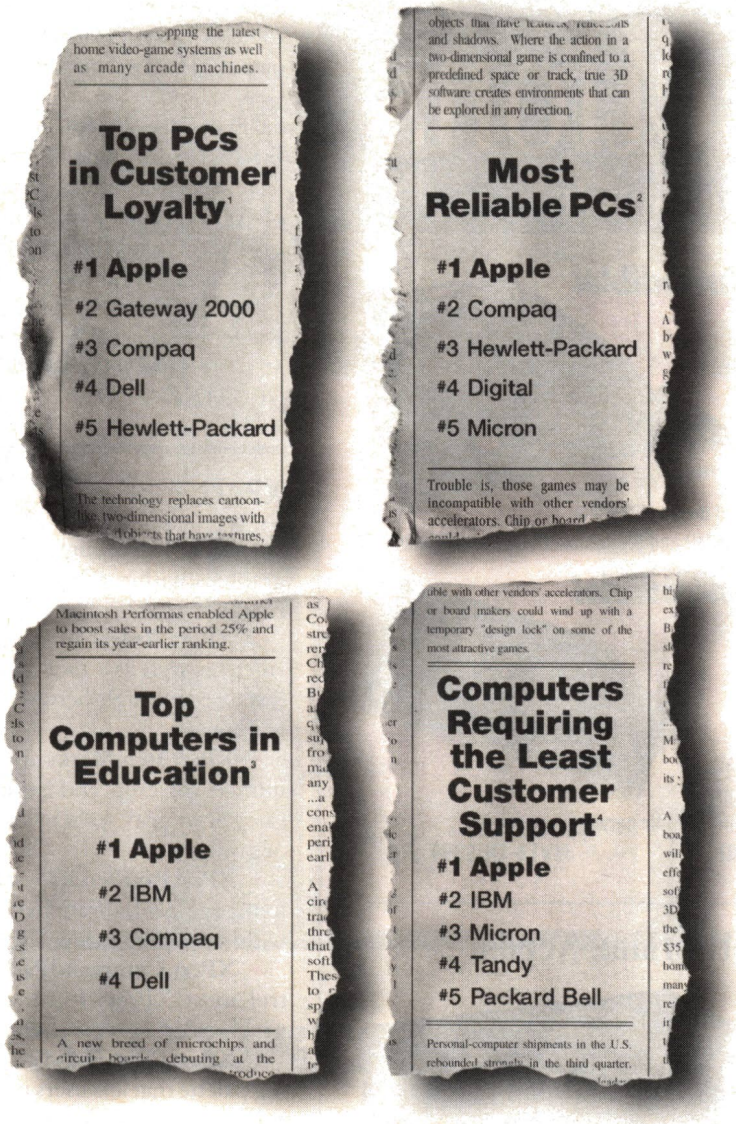
The $79 Professional Lens Pack includes lens-flare and depth-of-field plug-ins as well as a set of filters for optical effects. The depth-of-field plug-in lets users blur images by setting f-stops and changing the length of camera lenses.

The $29 3D Fun Pack contains a series of plug-ins for creating stereo 3-D images within Ray Dream Studio. With the Auto Stereograms plug-in, users can create Single Image Random Dot Stereograms, repetitive patterns that reveal a 3-D image that can be viewed without special glasses. An anaglyph plug-in generates images that can be seen through red-blue or blue-green glasses; a ChromaDepth extension creates images to be viewed through transparent 3-D glasses. Both colored and transparent 3-D glasses are included with the package.

A bundle of both packages will cost $99.

Ray Dream Inc. of Mountain View, Calif., can be reached at (415) 960-0768 or (800) 846-0111; fax (415) 960-1198; http://www.raydream.com.

Some sound reasons to buy a Mac.



...opping the latest home video-game systems as well as many arcade machines.

Top PCs in Customer Loyalty[1]

#1 Apple
#2 Gateway 2000
#3 Compaq
#4 Dell
#5 Hewlett-Packard

The technology replaces cartoon-like, two-dimensional images with ...bjects that have textures,

...objects that have realistic reflections and shadows. Where the action in a two-dimensional game is confined to a predefined space or track, true 3D software creates environments that can be explored in any direction.

Most Reliable PCs[2]

#1 Apple
#2 Compaq
#3 Hewlett-Packard
#4 Digital
#5 Micron

Trouble is, those games may be incompatible with other vendors' accelerators. Chip or board ...

Macintosh Performas enabled Apple to boost sales in the period 25% and regain its year-earlier ranking.

Top Computers in Education[3]

#1 Apple
#2 IBM
#3 Compaq
#4 Dell

A new breed of microchips and circuit boards debuting at the ...

...tible with other vendors' accelerators. Chip or board makers could wind up with a temporary "design lock" on some of the most attractive games.

Computers Requiring the Least Customer Support[4]

#1 Apple
#2 IBM
#3 Micron
#4 Tandy
#5 Packard Bell

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[1]*Consumer Technology Index study published 7/95 by Computer Intelligence InfoCorp.* [2]*Based on a reader survey published 12/95 by* PC World. [3]*Figures represent planned K-12 purchases for U.S. public schools as published in Quality Education Data's 1995-96 Technology Purchasing Forecast.* [4]*Based on a reader survey published 11/95 by* Home PC.

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Agfa

From Page 12

The Avantra 30 will be compatible with all Agfa software RIPs, including the Viper 1.9 (see 10.09.95, Page 4). The device, like other Avantra models, will use film, paper or polyester plate material.

In addition, Agfa recently shipped its new AccuSet Plus line, which consists of four capstan imagesetters.

The AccuSet 800 Plus, available now for $26,500, will replace the company's 800 model. The new version will support 200 lpi, as opposed to 175 lpi for the previous model.

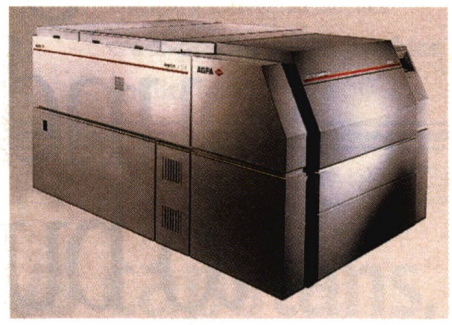
The 800 Plus will feature a repeatability of 1 mil over eight separations, offer resolutions up to 2,400 dpi, and be able to produce 7.5 inches of output per minute at 1,200 dpi, Agfa said.

The $36,500 AccuSet 1000 will support up to 200 lpi, but at a slightly higher resolution of 3,000 dpi. This midrange model will be able to dispense 15 inches per minute at 1,200 dpi.

Next in the AccuSet line is the $49,500 1400 Plus; like the AccuSet 1000, the 1400 Plus can deliver up to 3,000 dpi and also supports up to 200 lpi. However, the 1400 Plus includes the company's internal Star 400 Adobe PostScript Level 2 RIP.

The $41,500 AccuSet 1500 Plus, like the 1000 Plus, will feature resolutions of up to 3,000 dpi and 200 lpi. According to Agfa, the high-end model is up to 50 percent faster than the other imagesetters because of Agfa's higher-speed transport mechanism. Agfa said the 1500 Plus can handle 22.5 inches per minute at 1,200 dpi.

Agfa, a division of Bayer Corp., of Ridgefield Park, N.J., can be reached at (201) 440-2500 or (800) 685-4271; fax (201) 342-4742. □



The four-up SelectSet Avantra 30, the first in Agfa's new generation of drum imagesetters, contains a new, 30,000-rpm motor that can output 30 flats per hour at 1,200 dpi.

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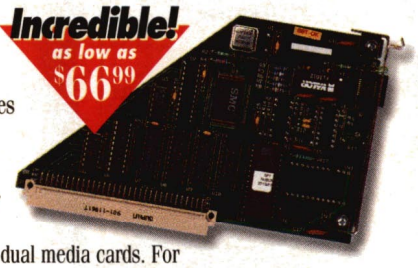

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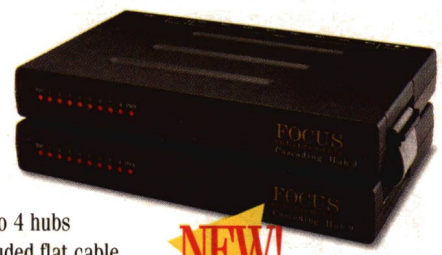

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XPert

From Page 12

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- **XPert Preferences** lets users customize a variety of interface elements of XPress.
- **XPert Loader** selectively loads tools according to custom styles.

XPert Tools Volume II is priced at $129, but it will be available for $99 through the end of the month.

In addition, a lowly apprentice production introduced Version 2.0 of ShadowCaster, its $99 XTension for generating drop shadows behind text and graphics from within XPress (see 06.12.95, Page 12).

ShadowCaster 2.0 can burn shadows into CMYK and RGB TIFF images and gray-scale graphics. It also lets users screen, add to and subtract from pixel values. The upgrade is significantly faster than its predecessor, the company said.

XChange Publishing Systems International of Fort Collins, Colo., can be reached at (970) 229-0620 or (800) 823-0553; fax (970) 229-9773. □

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Hermstedt, Sat-Sagem to offer ISDN solutions

Crop of PCI cards due from Europe

By Joanna Pearlstein

Users seeking ISDN options that fit a Mac PCI slot can look to two European vendors that are bringing their cards to the United States.

Hermstedt GmbH, a major player in the German ISDN, or Integrated Services Digital Network, market, in March will offer a panoply of Mac ISDN products.

Andante, Hermstedt's external ISDN terminal adapter, has one B channel and supports speeds up to 57.6 Kbps. The company will offer two PCI ISDN cards: the Leonardo SP, a two-channel card that can transmit files at up to 128 Kbps; and the Leonardo XL, a four-channel card offering transmission up to 256 Kbps.

Users can add Pan, a 14.4-Kbps fax-modem card, to the Leonardo cards, removing the need for an external fax modem. NuBus versions will also be offered. Performa and

The LeoTalk Pro package lets users transfer files over ISDN-based WANs.

LC users can add ISDN with Pinocchio, a dual-channel card that fits in a processor direct slot.

Final pricing has not been set, but Hermstedt said the cards would range from $500 for the PDS card to roughly $1,000 for the four-channel PCI card. The company will also offer three software packages: a WAN file transfer utility, a remote-access package and a Point-to-Point Protocol (PPP) stack.

Also new on the PCI ISDN scene are two cards from France's Sat-Sagem, which are available now. The $995 Planet PCI card is an ISDN card that provides two B channels for transmission speeds to 128 Kbps.

The $1,850 Meet-Me PCI card is Sat-Sagem's videoconferencing solution. It offers an H.320 compressor-decompressor along with ISDN and comes with videoconferencing as well as a whiteboard application. Both cards come with Planet PPP, the company's PPP stack. Sat-Sagem is also shipping TheWave, a $795 application for sharing communications hardware over a network.

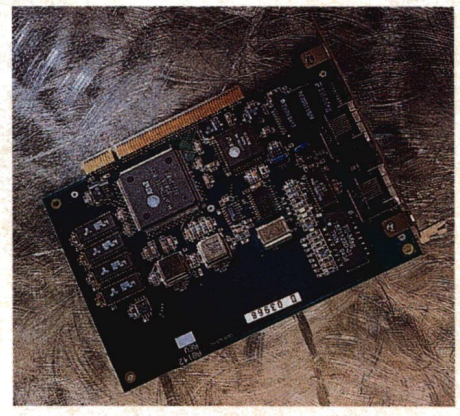
Hermstedt USA of Carlsbad, Calif., can be reached at (619) 730-0370 or (800) 828-5522; sales@hsd.com.

Sat-Sagem of Cupertino, Calif., is at (408) 446-8690; fax (408) 446-9766; satinfo@satusa.com; http://www.satusa.com. □

100VG-AnyLAN comes to the Mac

By Clifford Colby

Although 100VG-AnyLAN became a standard around the time 100-BASE T did, most Macintosh users have heard more about the latter than the former. This is because no company offered a Mac 100VG card, a situation about to be resolved by Ragula Systems Inc.



Never heard of 100VG? You will when Ragula ships its 100-Mbps 100VG-AnyLAN and 10-Mbps Ethernet PCI card.

Ragula claims that its $239 PCI card, expected to ship later this month, will be the first 100VG Mac card to hit the streets. Ragula's PCI card will come with two connectors, one for 100VG and another for 10-Mbps Ethernet.

The company also intends to offer 100VG for NuBus in March. Ragula already has six- and 24-port 100VG hubs, a 10-port modular hub that can accept a SNMP (Simple Network Management Procotol) module or an Ethernet-to-100VG bridge module and a stand-alone 10-Mbps Ethernet to 100VG bridge.

100VG avoids Ethernet's collision problems with token-ring-like, round-robin access. The

See Ragula, Page 18

Compatible readies routers

By Clifford Colby

Compatible Systems Corp. said it plans to ship this month several routers that will offer multiprotocol and Internet capabilities.

The MicroRouter 2200R will route AppleTalk, DECnet, TCP/IP and IPX over LANs and will support Frame Relay and Point-to-Point Protocol (PPP). The $1,695 device will include one Ethernet port and two WAN ports: a V.35 high-speed interface and an RS-232C serial interface. The $1,895 MicroRouter 2220R will route the same protocols as the 2200R but will include two Ethernet ports.

Tailored for connecting a LAN to the Internet, the $1,495 MicroRouter 1200i will route TCP/IP, Frame Relay and PPP; the 1200i will come with one Ethernet port and V.35 and RS-232C WAN interfaces. The MicroRouter 1220i will also route TCP/IP, Frame Relay and PPP, and it will include two Ethernet ports, allowing network administrators to set up public and private networks. The 1220i will have V.35 and RS-232C WAN interfaces.

For security, the new routers will support Challenge Handshake Authentication Protocol and Password Authentication Protocol. The devices will come with RouterView, Compatible's management software for the Mac.

Compatible Systems Corp. of Boulder, Colo., is at (303) 444-9532 or (800) 356-0283; fax (303) 444-9595; info@compatible.com; http://www.compatible.com. □

ForeFront to put conferencing on RoundTable

By James Staten

While chivalry may be dead, the art of Internet-based conversation is alive and kicking in The ForeFront Group Inc.'s RoundTable.

A client-server conferencing package, RoundTable will not support sharing video but instead will have a window for text-based conversation and a "canvas" for viewing images and exchanging documents.

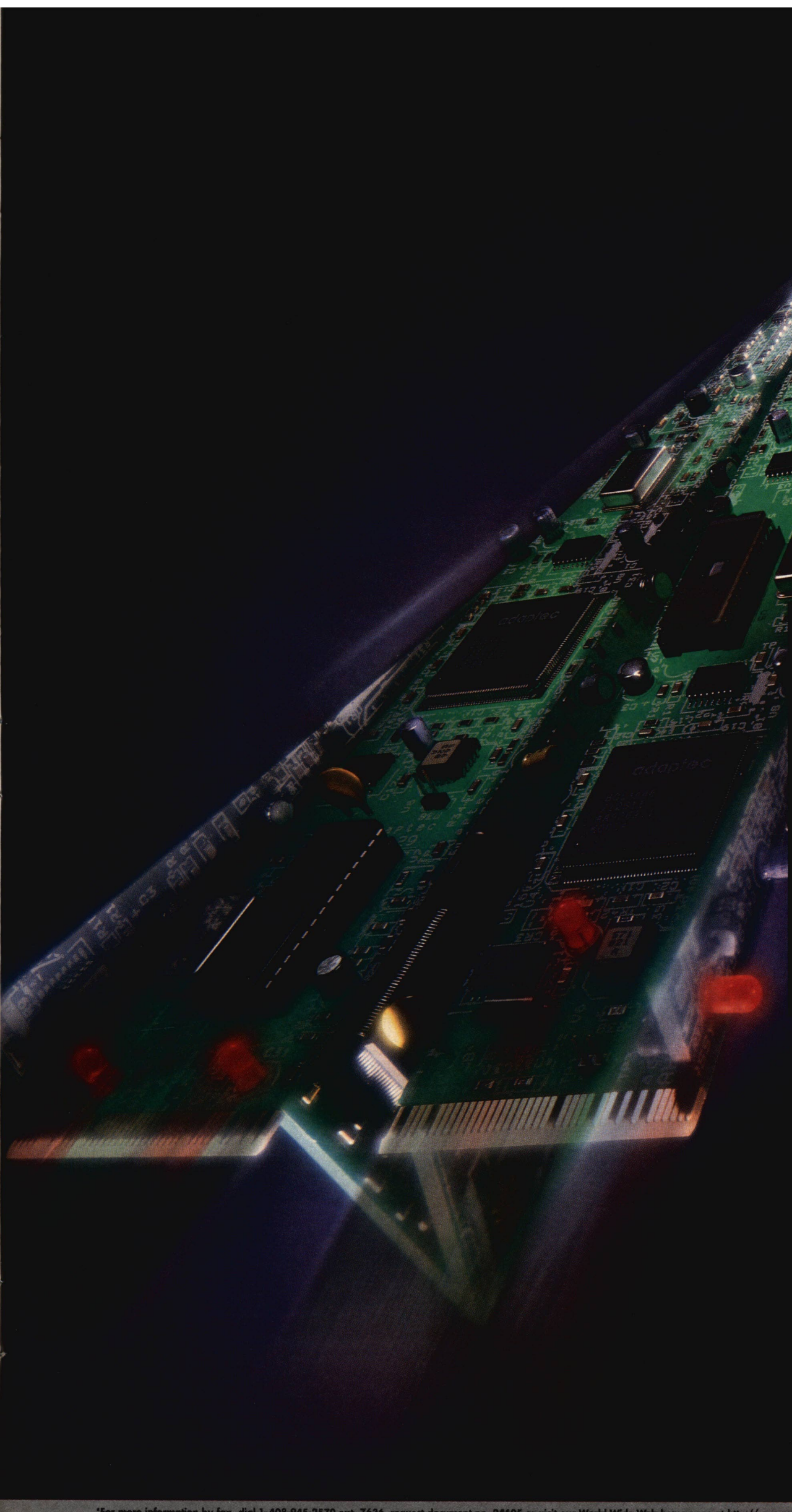
RoundTable is a helper application that let users work together to modify or create new documents. Graphics saved in PICT, JPEG, GIF or BMP formats will be viewed and shared on the canvas; other file types will be displayed as icons that must be viewed in another application. The server will allow for both moderated and unmoderated conferences among an unlimited number of users.

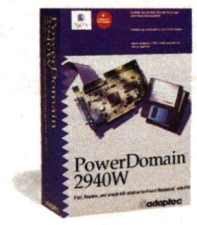
ForeFront Group's RoundTable Internet conferencing system lets users share conversation, as well as files and graphics, which can be annotated.

The RoundTable client, currently available in beta form on ForeFront's Web site, will be offered for Mac, Windows 3.1, Windows 95 and Unix; only the servers for Windows 95, Windows NT and Unix will ship.

Both server and client are expected to ship in March. The client will remain free; pricing for the server will depend on the number of simultaneous users and conferences provided.

The ForeFront Group Inc. of Houston can be reached at (713) 961-1101 or (800) 867-1101; fax (713) 961-1149; info@ffg.com; http://www.ffg.com.





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Ragula

From Page 16

standard has two transmission levels: one for time-sensitive data, such as video, and another for normal data; it can also transmit Ethernet frames at 100 Mbps.

"It certainly is a superior technology," said Dan O'Halloran, a networking specialist with the San Juan Unified School District in Carmichael, Calif. O'Halloran, who oversees computer labs in 80 schools, is considering moving to 100VG. "100VG doesn't have collision problems, so on a high-end system, you should be able to push past Fast Ethernet speeds," O'Halloran said. "And as software gets more sophisticated, 100VG, with its high-priority services, should fit in."

In related news, Hewlett-Packard Co. said it intends this spring to roll out 20 new networking devices, many tailored for 100VG. Although the company did not release product details, the devices will include switches, print servers and 10- and 100-Mbps hubs. Hewlett-Packard sells 100VG cards, but the company said it doesn't plan to offer Mac drivers for them.

Ragula Systems Inc. of Salt Lake City can be reached at (801) 281-3434; fax (801) 281-0317; phardy@ragula.com; http://www.ragula.com.

Hewlett-Packard Co. of Palo Alto, Calif., can be reached at (800) 533-1333; fax (800) 231-9300; http://www.hp.com. □

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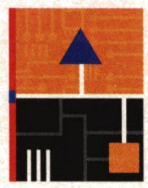

- **Neon ships LANsurveyor 3.0**
- **Frame Relay, ISDN on a router**

Neon Software Inc. is shipping Version 3.0 of LANsurveyor, the Lafayette, Calif., company's software for managing AppleTalk networks. The new version adds a tool bar, support for PowerTalk and PageNOW! notification, improved TCP/IP support, and new AppleShare and SNMP (Simple Network Management Protocol) queries. A five-zone version costs $395; an unlimited-zone version is $695. …

Focus Enhancements Inc. of Woburn, Mass., announced LAN Ranger, a three-port Point-to-Point Protocol remote-access server. The $1,149 device, due this quarter, connects via 10BASE T and has three serial ports for modem connections. It supports transmission speeds up to 115.2 Kbps. … **Ascend Communications Inc.** of Alameda, Calif., has combined ISDN (Integrated Services Digital Network) and Frame Relay in one router. The new Pipeline 130 family supports multiple WAN services, ISDN and bandwidth on demand. Prices range from $1,895 to $1,995. … **4-Sight L.C.** of West Des Moines, Iowa, has debuted Version 4.0 of iSDN Manager. Due in March, the new version will provide retrieval and inbound routing capabilities without a WAN. A single-line Basic Rate Interface (BRI) solution costs $2,795; a four-line BRI solution goes for $5,495. …

Men & Mice of Reykjavik, Iceland, released its primary domain name server (DNS) application, QuickDNS Pro. Priced at $290, QuickDNS Pro can perform both primary and secondary DNS functions; it is compatible with both MacTCP and Open Transport. A demo version of QuickDNS Lite is available at ftp://ftp.menandmice.is/pub/quickdns/quickdnslite.sit.hqx. □

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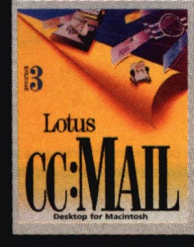

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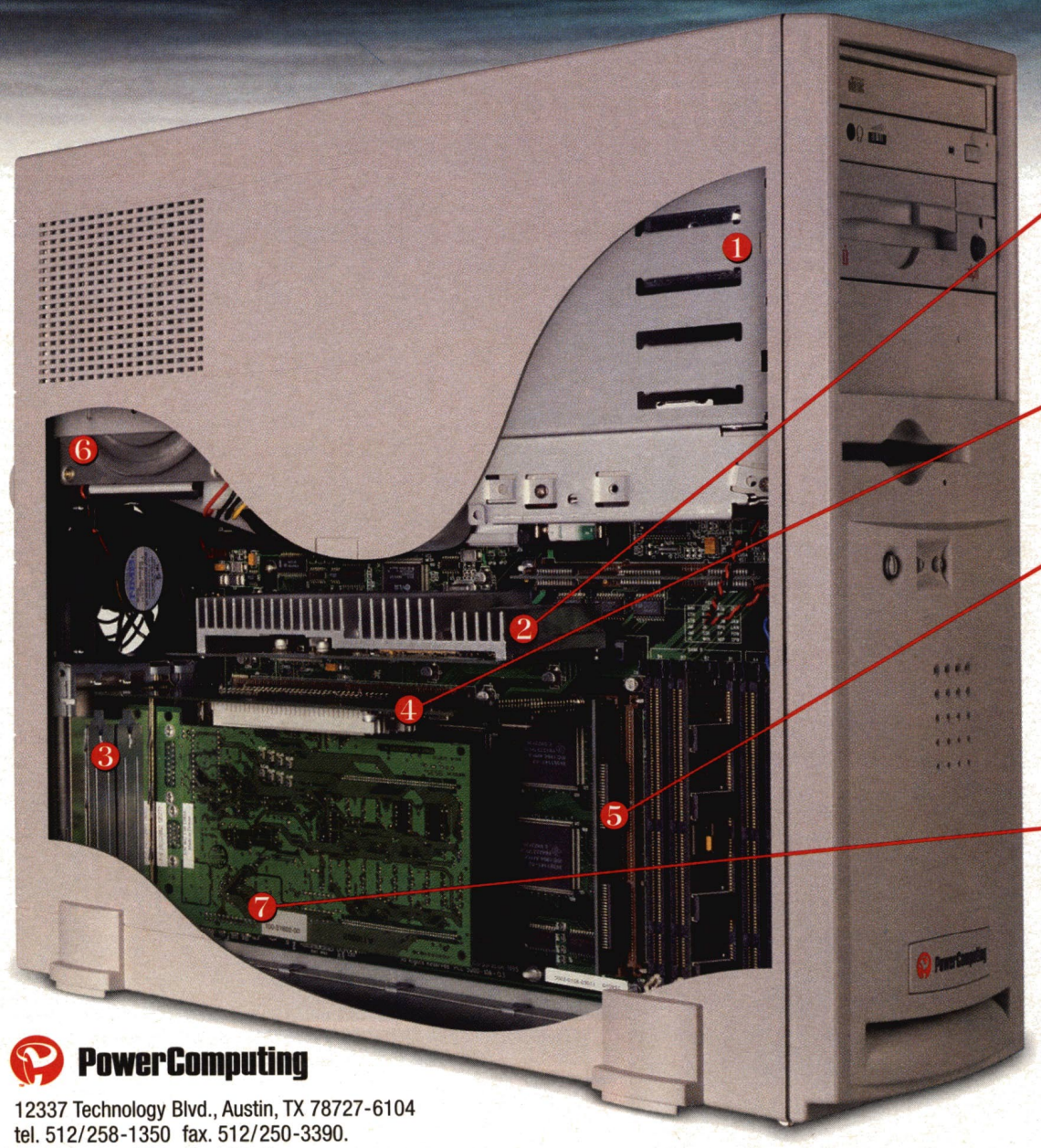

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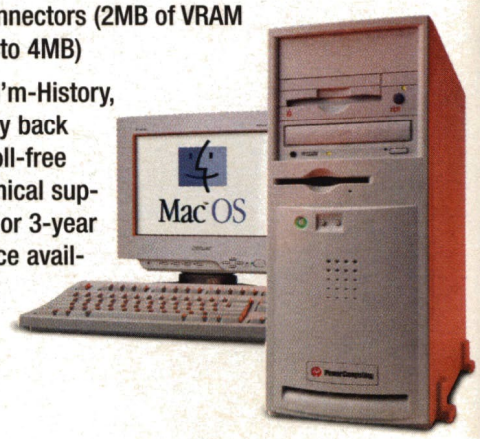

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BPA INTERNATIONAL

Lessons to learn

Departing CEO Michael Spindler fought hard to eliminate the cult of personality from Apple. He saw the ghosts of Steve Jobs, John Sculley and others as anchors to a long-dead past that he wanted the company to leave behind. As it happens, it was Spindler's inflexible personality that weighed heavy on Apple.

Although he refused to accept this, his inability to inspire confidence among Apple executives and employees, stockholders, third-party developers, and the press was a factor in Apple's travails. While he was very good in one-on-ones with people, impressing them with the depth and complexity of his ideas, his cerebral nature failed him with large audiences and the media.

Developers found him remote and seemingly disinterested in their problems. Most never even met the man. When they did, he did most of the talking, impressing them, of course, but depressing them, too, because they felt cheated for not getting to relate their side of the issues.

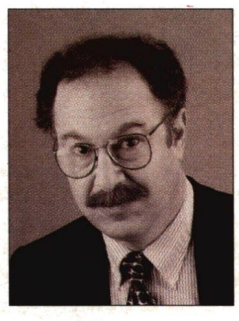
Spindler's anger at executives in Cupertino who questioned his decisions resulted in the hemorrhaging of so much talent that, ironically, one of his successor's first tasks will be to hire people, not fire them. At the end, Spindler believed any criticism equated to plots against him.

Finally, shareholders thought he had lost touch with their need, which was to build a financially strong enterprise. Having learned that he was the primary naysayer to an IBM Corp. bid for the company, they exploded with anger. His natural secretiveness prevented him from explaining why such a deal would have been tragic for Apple.

The lessons for the incoming chairman and CEO are simple: It's important to be a strong leader and to have a staff that executes a clearly defined plan. That's a given. But if the plan sputters, even backfires, don't persecute those who inform you. Listen, learn and adapt. That's what Michael Spindler could not do. And that's why he is packing his bags. □

THE SECOND DECADE HENRY NORR

'Transformation' sounds good, but vision needed



Even before Gilbert Amelio's appointment as chairman and CEO of Apple was official, I dashed off to my local bookstore to pick up a copy of his book, "Profit from Experience," co-written with William Simon and published just last month by Van Nostrand Reinhold. Though subtitled "The National Semiconductor Story of Transformation Management," it offers few details about Amelio's tenure at National Semiconductor Corp. The main focus is on his approach to business leadership, specifically as applied to ailing companies.

Transformation vs. turnaround

Amelio calls his objective "transformation," or laying the groundwork for long-term prosperity, in contrast to "turnaround," which he defines as a quick fix achieved by slashing expenditures indiscriminately.

There's much here that will calm nerves at Apple: Rather than wholesale housecleaning, he writes, "... my answer is always the same: Start with the people who are already there." He calls layoffs "a sign of management failure." And he demands careful consideration when cutting costs: "If you respond [to a poor quarter] by just tightening the screws on all expenses, you will be unable to focus management energy on the critical issues of investing and, in fact, merely discourage the organization. I put this in the penny-wise-and-pound-foolish category."

On the other hand, his forbearance shouldn't be overestimated. He insists that a new CEO must act boldly and be prepared to "kill a lot of projects." As for firings, he's clearly a patient man, but he says, "If it's necessary to shoot one of the lead buffaloes in order to send a message to the rest of the herd, you'd better be prepared to do it."

Amelio labels "operational excellence" a company's "No. 1 strategic weapon" because "the greatest strategic plan in the world isn't worth much if you can't implement it." (At one point he says the opposite, but that's apparently a typo.)

Rethinking Apple

Heaven knows Apple has paid dearly for its operational shortcomings, but at this point I don't see how it can recover its bearings without rethinking its strategy in a more basic sense: redefining its place in a world where Wintel dominates the desktop.

It's not surprising that this book provides no clues about Amelio's thoughts on such matters; what bothers me is that he seems to give short shrift to this deeper dimension of leadership. The strategic-planning process he set up at National, as he describes it, works from the bottom up. Plans are made by the lowest-level business units, then "rolled up" into a corporate plan, with senior management resolving conflicts and filling gaps.

I don't think that approach will work for Apple today. The company needs a bold new vision to unify its employees and rally its customers, and I don't know where it can come from if not the top. Let's hope Amelio can add that kind of leadership to his repertoire. It would make a nice subject for a sequel. □

Henry Norr, editor emeritus of MacWEEK, welcomes feedback in the MacWEEK forums on CompuServe or eWorld or at henry_norr@macweek.com.

LETTERS

Sun doesn't shine

I could not let the article by James Staten "Here comes the Sun" (01.22.96, Page 3) glide by without challenge. He says that a Sun Microsystems Inc. takeover could be a good thing for Apple. In my opinion a Sun takeover of Apple would be disastrous.

I recently had need to purchase a loaded SPARCstation 20/61, which I assumed would come with Sun's Solaris operating system. Wrong-o. When I called to inquire how I could get the OS, I was told by the salesman that I should try to get it from users at my location.

Upon complaining to various officers at Sun about this distribution method, I received a call from a district sales manager who explained that her company felt that most individuals would not use the Solaris CDs and that the company did not wish to waste money distributing them. Even after I asked her if I could have the CDs, I never was able to get them from Sun. I did finally get Solaris from an acquaintance and, although it is very Mac OS-like, I find there are many things about it that make it difficult to use.

As bad as Apple is, I'll take it over Sun any day. Sun ownership of Apple may yet come to pass, but if that happens, Sun will gain not the 22 million Mac users enumerated by Staten, but only 21,999,999.

Daniel R. Rosen
New York State Department of Health
Albany, N.Y.

Rotten core concept

There is an attitude forming in the Mac community that scares me. At its core is the concept that the Macintosh platform will be fine if Apple dies. This is illustrated by Don Crabb's Mac Manager article (01.22.96, Page 21). I don't know about everyone else, but I would not like to see the demise of Apple one bit.

Why? Because Apple has guts. It had to in order to start making Macs in 1984. I don't know of another company that would even want to touch the idea of introducing something like the Newton. And what about its constant attack against the Wintel giant of computing with the "Dinosaurs" commercial and the "Imagine That" ads?

It's exciting to see the new breakthroughs in technology from Apple. QuickTime VR, QuickDraw 3D and OpenDoc are just a few of 1995's additions out of Cupertino. Apple has been working — and continues to work — on something every day that Microsoft has done only every few years: making its computers run better.

Marc Drumm
University of Delaware, Newark

Muddy money waters

Nice discussion of Apple's handling of the many rumors (01.29.96 Page 3). But please be careful about your accounting terms; for example, "the sad state of Apple's balance sheet."

Any company would be happy to have Apple's balance sheet with about $1 billion in cash and short-term securities and essentially no debt. This quarter's loss is a minor dent there. Its profits-and-losses statement is where the bad news is.

A muddy understanding of accounting does not help to clarify the issues surrounding Apple's loss.

Guy S. Hermann
Director of information services
Mystic Seaport Museum Inc., Mystic, Conn.

QD3D or OpenGL?

I think QuickDraw 3D is a great idea and looks very good. It would have had a long life if it had come out with System 7.1.

An existing 3-D modeling library is already becoming standard. Apple should not turn its back on it. This library is OpenGL from Silicon Graphics Inc.

I feel that either QuickDraw 3D needs to be scuttled in favor of an OpenGL library to be added to Mac OS or QuickDraw 3D needs to be a superset of OpenGL.

Apple should work out something with SGI; maybe give them rights to QuickTime in return for rights to OpenGL.

Michael Grabenstein
Maxima Corp., Lanham, Md.

Clueless Lotus

One has to wonder how many Mac users Lotus hopes to win over with its current cc:Mail ad (01.22.95, Page 27). Perhaps picturing a Mac window in its ad instead of one from Windows would convey to Mac buyers that they've even seen a Mac. Did they simply search and replace the ad copy for their Windows product? We've all seen bad Mac software, ported with the same philosophy. I've never even seen Mac cc:Mail, but for Lotus' sake I hope it's more Mac-native than its ads.

David Fagan
BBN Inc.
Cambridge, Mass.

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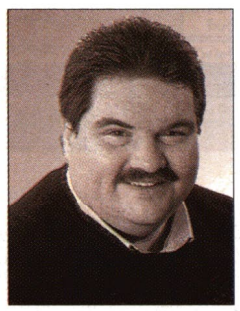
THE MAC MANAGER DON CRABB

Times have been better, but they could be worse

"It was the best of times. It was the worst of times." If Charles Dickens were alive today, he might be writing this about Apple for the London Daily Mirror.

Alas, today's great newspaper writers are not covering the goings-on at Apple, or we wouldn't see headlines that scream: "Death of an American icon," "Macs are nice, but are they forever?" or, my favorite, "Apple tells developers to drop dead."

Now that Apple has finally picked a gangbuster of a new CEO, Gilbert Amelio, I wonder what sort of hatchet job we can expect from some of my colleagues who cover Apple for the general press?



Pay attention and learn

As a public service to my fellow journalists, let me give them a little help with this story. First, here's the headline: Apple finally got it right.

And the lead: Apple got the right guy to run a company that cries out for a tough-minded but technically savvy manager.

Now the story: Apple's new right guy is Amelio, the now-outgoing top executive of National Semiconductor Corp. And Apple is giving its new guy the right titles to make the necessary changes — he'll become CEO, president and chairman. It's his show now, all the way down to the tub of popcorn.

Amelio was already a member of Apple's board of directors, so he knows well the crisis of confidence in its outgoing top manager, Michael Spindler. He's equally familiar with the problems up and down the Apple food chain.

Fortunately, Amelio knows how to transform companies that have gone off course like Apple. As cases in point, he fixed both a Rockwell International Corp. division and National when they lost their way down their strategic paths.

He didn't do it with flash-in-the-pan ideas, nor did he take an endless plodding approach. He did it by setting long-term strategic plans and then made certain people executed them. What a concept!

The book of Gil

Finally, here's your sidebar: I've met Amelio and heard him speak on several occasions. I've also read the book he recently co-wrote with William Simon called "Profit from Experience," and I am impressed — big time.

I find too many CEOs are merely pinheads in suits, but Amelio rises far above that. He's the genuine article — a manager with a vision who looks to build companies around long-term strategies, not quarterly profits. While he might want to merge Apple with another company down the road, he won't sell Apple on a quick-buck lark.

Amelio also has a strong technical background, with a doctorate in physics and stints at AT&T Bell Laboratories Inc. and Fairchild Camera and Instrument Corp. He holds 16 patents as a result of his research, so he has more than a clue about the importance of technology.

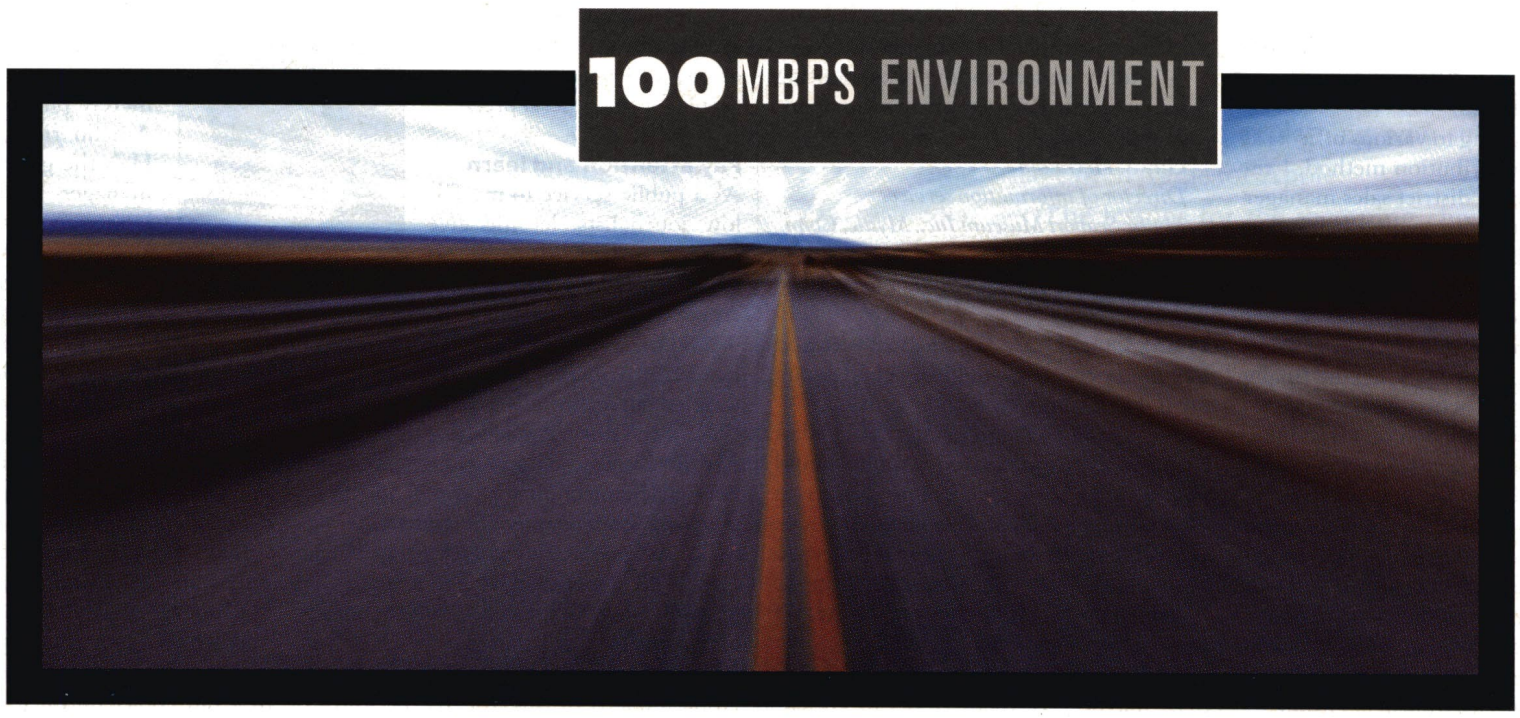
While no new CEO can immediately fix a company with as many management and operational problems as Apple, Amelio is a first-rate choice for the job. He knows the business, he knows Apple, and he knows how to make decisions.

Now, ladies and gentlemen of the press, can you get the story right for once? □

Don Crabb welcomes comments at his Internet address decc@cs.uchicago.edu. You can also check out his home page at http://cs-www.uchicago.edu/~decc/.

Suddenly overcome by computer phobia, Bob's career as a programmer came to an end.

Comments? Ideas? Contact Eli at elitoons@aol.com



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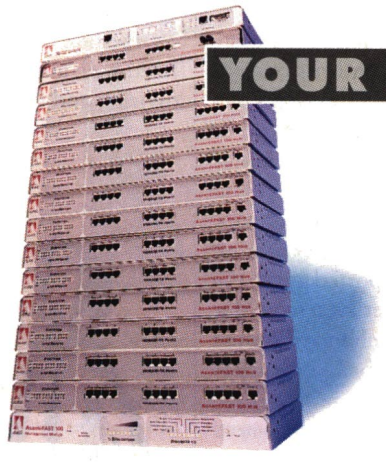

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FREE SOFTWARE

ZD Net's QuickLaunch (see the OneClick review, Page 30) is available via ZD Net/Mac on CompuServe and eWorld.

Tango twirls Web servers in dance with databases

By Ric Ford

EveryWare offers a robust way to join databases to Mac Web servers.

If you are comfortable with both advanced database development and the Web, EveryWare Development Corp.'s Tango can save you time and trouble in constructing a Web-based information system. The $495 product is a construction kit for joining back-end relational databases to a Mac Web server.

Currently shipping in a $495, two-user bundle with EveryWare's Butler SQL (a multi-user, Mac relational database server), Tango is only one part of the puzzle. You also need StarNine Technologies Inc.'s WebStar server on the Internet side, a separate $795 purchase. EveryWare also promises an Open Database Connectivity version of Tango (due shortly) to connect WebStar with database-management systems from other companies, including Oracle Corp., Informix Software Inc. and Sybase Inc., but you can create a heavy-duty server today with WebStar and the Butler SQL version.

It takes two

You use Tango to construct a system in which database information is collected or presented via the Web. Such a system might be on an internal, private network or it could serve the millions of people with access to the Internet at large. You could use it to set up a product catalog, for example, or to collect information from a community of people through Web forms.

Tango consists of two parts: The Tango.acgi program serves as the intermediary between WebStar and the database engine. It exchanges CGI (Common Gateway Interface) messages with WebStar via Apple events and converses with Butler SQL in its native Data Access Language.

Tango Editor, the other half of the pair, is a graphical application builder that directs the actions of Tango.acgi through "query documents." These files specify database operations for Butler SQL on the back end and control the HTML results returned to WebStar on the front end.

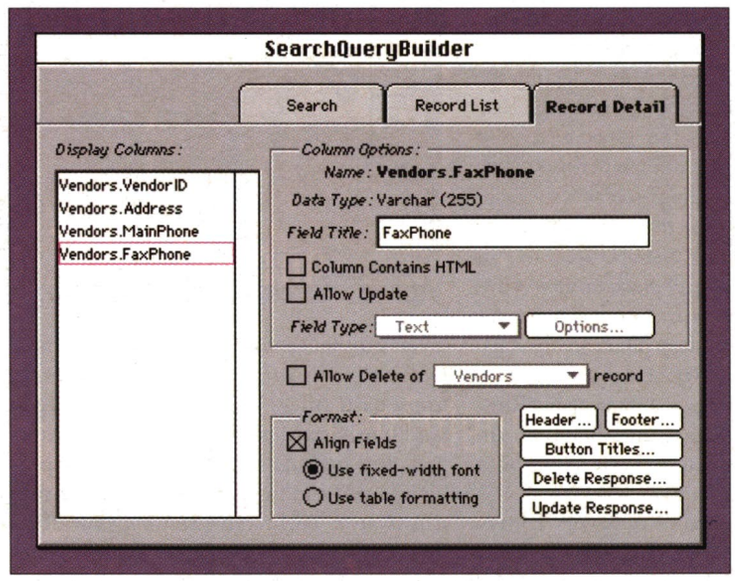
To use Tango, you must understand thoroughly both the database-management system and the Web server. Most people should find it easy to assimilate WebStar, but Butler SQL is far more complicated. Since Tango needs a Butler database before it can do anything useful, the product is a tool for experienced database developers, not a toy for novice Web hackers. Tango developers also need a complete understanding of HTML.

Installing the software components is straightforward enough, once you understand each part's role. The next step is constructing the database with the Butler Tools utility. Once this is done, you can build a simple Web interface to the database quickly in Tango Editor. The program's friendly Mac operations let you select records and fields, set options, and create the query documents that you reference in URLs (uniform resource locators) within your Web pages.

To provide a database-searching capability, for instance, you connect Tango Editor to the database server, select appropriate fields and save a query document in the WebStar folder. Tango Editor puts an appropriate URL on the Clipboard that you can paste into a file in your HTML editor.

When someone clicks on that link in a Web browser, Tango.acgi extracts the name of the query document from the URL and gets the HTML code from the document, then displays a form on the browser's screen. When the person clicks a Find button on the form, the browser sends search parameters back through WebStar to Tango.acgi, which then queries Butler SQL, again referring to the query document. Tango.acgi returns the

See Tango, next page



EveryWare Development's Tango provides fairly easy-to-use tools for creating query documents for accessing databases over the Web. Using Tango Editor, you define Search and New Record templates by dragging fields from one window to another and specifying various options.

score card

Tango 1.0

EveryWare Development Corp.
List price: $495*
Overall value ◆◆◆◆

Tango is a construction kit and application generator for professional developers to integrate StarNine Technologies Inc.'s WebStar Web server with a relational database (currently the bundled Butler SQL database only). If you understand the technologies of relational database development and the Web, Tango offers streamlined development tools, essential glue components and a powerful database engine to get the job done. Tango does not insulate you from HTML or from programming, but it automates some of this work nicely.

Performance ◆◆◆◆
Features ◆◆◆◆
Ease of use ◆◆
Documentation/support ◆◆◆

**Bundled with two-user Butler SQL database; also requires WebStar.*

Key ◆◆◆◆◆ *Excellent* ◆◆◆◆ *Very good* ◆◆◆ *Good* ◆◆ *Fair* ◆ *Unsatisfactory*

Adobe Illustrator 6 dons new plug-in architecture

From Page 1

its strongest competitor, the $595 Macromedia FreeHand 5.5.

The new version is also notable for what comes with it: Included on the CD-ROM for no extra charge are Adobe Dimensions 2.0 for creating 3-D effects, Adobe ScreenReady 1.0 for rasterizing EPS files, all three volumes of Adobe Gallery Effects plug-in filters, and 300 Type 1 fonts. Priced at $99 for owners of any previous version of Illustrator or FreeHand, the upgrade is well worth it for Illustrator users, but FreeHand fans may not find enough reasons — other than the extra software — to make the switch.

Come together

With Illustrator 6, Adobe unveils a new API for plug-ins designed to work across the company's product line. Eventually, this means any plug-in should work with any Adobe application. What this means in the short run is that now, finally, Illustrator can work with Photoshop plug-ins. You can access any Photoshop-compatible plug-in from within Illustrator and apply it to any placed artwork. (Macromedia actually beat Adobe to the punch on this score with FreeHand 5.5. See 11.27.95, Page 51).

You can also now drag and drop a selection from Photoshop directly into an Illustrator document, and Illustrator automatically converts it into a placed graphic in your document. Similarly, you can drop Illustrator shapes into Photoshop documents, where they are automatically rasterized and placed into the current layer. Holding down the Command key while dropping causes Photoshop to import the objects as paths.

Along with Photoshop files, Illustrator 6 lets you directly import files in a number of graphic formats, including TIFF, PICT and EPS. In previous versions, the only way to include a bit-mapped graphic in an illustra-

See Illustrator, next page

Illustrator

From previous page

tion was to save the image as an EPS file and use Illustrator's Place command to create a link between your Illustrator document and the external EPS file.

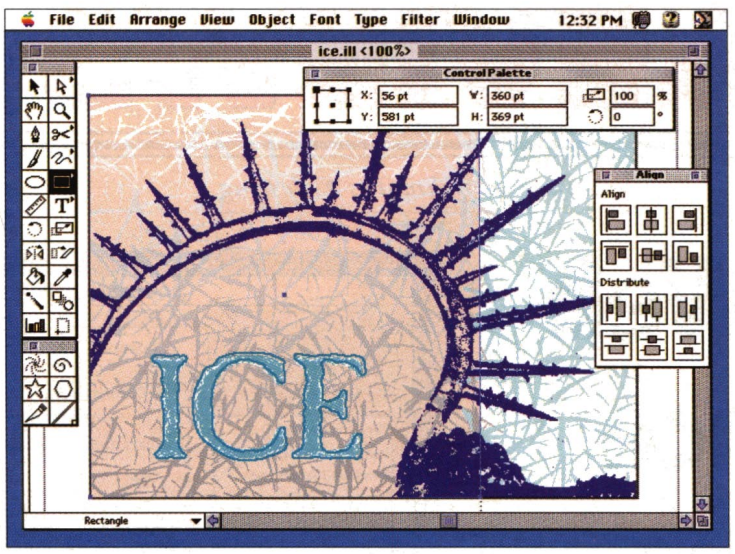
Objects to bits

Illustrator 6's new Rasterize command lets you immediately convert Illustrator shapes into bit-mapped objects. After selecting the objects to be converted, you choose the Rasterize command and then specify a color model and resolution in dots per inch. The resulting rasterized image replaces the original shapes in your Illustrator document.

You can apply Photoshop filters to this rasterized object, or any placed image, simply by choosing the desired plug-in from the Filters menu. (Photoshop filters are disabled if the selected object is not bit-mapped.) This makes it possible to draw a shape using Illustrator's tools, rasterize it, and then perform blurs or other bit-mapped effects without ever leaving Illustrator.

Although this capability is very convenient, there is a price to pay. Because Illustrator can't handle large, bit-mapped images as efficiently as Photoshop, filter operations are substantially slower (a problem also shared by FreeHand 5.5). For example, applying a Gallery Effects filter to a rasterized 300-dpi object in Illustrator took a little over two minutes on our Power Mac 7500, while Photoshop completed the same operation in about 20 seconds. Photoshop is also faster at rasterizing; it converted a saved Illustrator file about 75 percent faster than Illustrator could rasterize it.

Filter operations in Illustrator also require a lot of RAM. Just how much depends on the size of the object being filtered, but we needed at least 15 to 20 Mbytes allocated to Illustrator to perform even simple Photoshop filter operations.



Adobe Illustrator 6 includes new tools and filters that greatly expand your image-design possibilities. This image was created using the Ink Pen filter, a Gallery Effects plug-in and Illustrator's new capability to colorize one-bit TIFF images.

Finally, because some of Photoshop's most basic filters — such as Blur, Sharpen and Unsharp Mask — are no longer external plug-ins but are built right into the program, you can't access them from within Illustrator. Although the inclusion of all the Gallery Effects filters compensates somewhat, we'd still like to see Illustrator include a set of basic blurs and sharpens.

Plug-in along

Illustrator's new plug-in architecture has also made filters easier to work with. In previous versions, Illustrator plug-ins resided exclusively in the Filters menu, and you could interact with them only by changing numeric settings in a modal dialog box. With Version 6, plug-ins can now appear under any menu or can be implemented as interactive tools that sit in the new Tools palette or in entirely new palettes created by third-party developers.

All of the Text filters, for example, now reside more appropriately in the Type menu. The new Star, Polygon and Twirl tools on the Tools palette replace the filters of the same name from previous versions and let you interactively create stars and polygons or apply a Twirl distortion to any shape.

The new Knife tool lets you slice any object in two by dragging a line through it. For simple jobs, this is much easier than using the PathFinder Boolean operations. The old Eyedropper tool has been modified so that, in addition to picking up color from Illustrator objects, it can pick up colors from anywhere on the screen. This lets you match colors with placed images or with images from other applications.

The new Align palette combines the features of Version 5.5's Align and Distribute filters in an easier-to-use floating palette, while the new Control palette provides numeric control of any object's location, width, height, rotation, scale or shear.

Two completely new filters expand Illustrator's design capabilities. The Path Pattern filter lets you distribute patterns along a path to easily create borders and frames. You can specify separate patterns for the straight sections of a path, the inside corners and the outside corners. The new Ink Pen filter provides a complex but easy-to-use interface for creating and applying crosshatched patterns to any shape. With a robust set of controls, the Ink Pen filter can create patterns that look very much like they were drawn by hand.

All of these new features are great, but it also means that Illustrator now has 11 palettes, making it easy to clutter your screen and obscure your work with tools and controls. We'd like to see Adobe transfer Photoshop's nested palette approach to Illustrator, along with Photoshop's Commands palette for assigning controls and functions to function keys.

And despite all of Illustrator's capabilities, there's still more to be done. The program still lacks the capability to create multiple-page documents. It's color palette tools are clunky and pale in comparison with FreeHand's Styles capabilities. And how could Adobe make it all the way to Version 6 without ever adding a Move Forward/Backward command?

Conclusions

Although Version 5.5 was hardly showing its age, Illustrator 6 proves to be an important upgrade. In addition to providing a more powerful plug-in architecture and better integration with Photoshop, Adobe has layered on many important new tools and features that put the program back on par with FreeHand 5.5.

Slow filter operations and an interface that's beginning to feel overburdened temper our admiration, but Illustrator remains an incredibly powerful illustration tool. New users trying to decide between Illustrator and FreeHand should pay close attention to all that is bundled with Adobe's product. More than just a random collection of software, this package is not only great for illustrators, but is also a one-stop solution for creating simple graphics for Web and multimedia designers. Veteran Illustrator users will find the upgrade well worth the price. But even at the full list price of $595, this is still a great deal.

Adobe Systems Inc. of Mountain View, Calif., can be reached at (415) 961-4400; fax (415) 961-3769; http://www.adobe.com/. □

score card

Illustrator 6.0

Adobe Systems Inc.
List price: $595*
Overall value ◆◆◆◆

With Illustrator 6, Adobe has expanded its powerhouse design tool and more or less caught up with its strongest competitor, Macromedia FreeHand. A more powerful and effective plug-in interface; the capability to drag and drop images into and out of Photoshop and apply Photoshop filters; and direct importation of EPS, PICT and TIFF files are just a few of the upgrade's key enhancements. On the downside, though you can now accomplish many bit-mapped operations directly within Illustrator, slow performance may lead some users to just keep doing them in Photoshop. Also, the program is getting so feature-rich that the interface is beginning to feel a bit cluttered. But Illustrator is still an undeniably great program, and the wealth of bundled software further sweetens the pot.

Performance ◆◆◆
Features ◆◆◆◆
Ease of use ◆◆◆◆
Documentation/support ◆◆◆◆

**Upgrades for users of any previous version of Illustrator or FreeHand are $99 for the Deluxe CD-ROM, $129 for floppy disk/Deluxe CD-ROM combination.*

Tango

From previous page

search results to WebStar as HTML for display. When the search produces a list of records, the person can click on one of the items in the list, and the system delivers a detailed view of that record.

The same basic process and pieces handle adding and updating database records. Forms may contain standard user interface elements, such as pop-up menus, check boxes and scrolling fields. Adding them is easy and very Mac-like.

Programming and support

Moving beyond the query documents provided automatically by Tango Editor involves manipulating low-level HTML and SQL operations. Query documents are programs, and Tango Editor provides open, logical access to the details of these programs with its graphical programming interface. Butler SQL offers rich functionality, such as support for many data types, row-level locking and commit-rollback transaction processing; Tango Editor can also call custom SQL procedures.

Programming Tango is not an area for the technically faint, but Butler provides helpful documentation, including "The Practical SQL Handbook," an excellent reference book published by Addison-Wesley Publishing Co., plus a 300-page Butler SQL user guide and a loose-leaf Tango manual containing about 150 pages of tutorials and reference material.

> Tango is a helpful and flexible productivity tool for integrating almost any database function with WebStar in an all-Mac information system.

EveryWare's warranty covers just the program's floppy disks, but it offers various support resources, including a partnership program for system integrators, a Web site and several fee-based support options to supplement the initial 30 days of free support.

Conclusions

Tango is a very good tool within the constraints of its complexity. In limited testing, we encountered no bugs or obvious performance problems, and the user interface made sense. Those with the requisite technical resources should find Tango a helpful and flexible productivity tool for integrating almost any database function with WebStar in an all-Mac information system. The price is attractive, too, but hobbyists should look elsewhere for a simple way to add database operations to a Web site.

EveryWare Development Corp. of Mississauga, Ontario, can be reached at (905) 819-1173; fax (905) 819-1172; info@everyware.com; http://www.everyware.com. □

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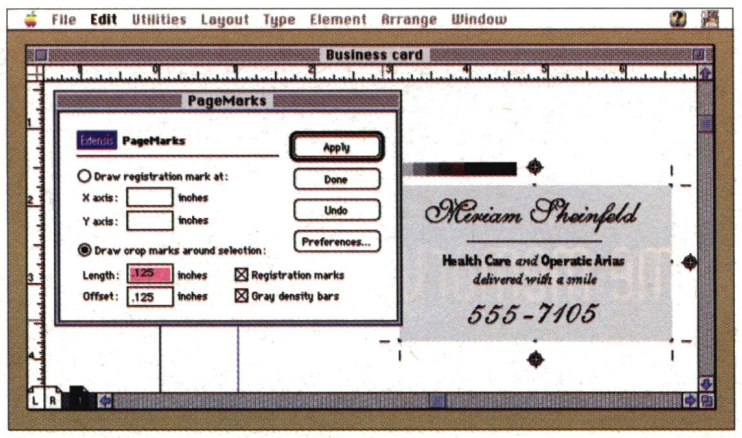
IN BRIEF

Extensis PageTools 2.0

PageMaker plug-ins improved, more diverse

Overall value ♦♦♦♦



One of the most useful new plug-ins in Extensis' PageTools 2 is PageMarks, which creates standard printer's marks at the push of a button.

With PageTools 2.0, Extensis Corp. has broadened the scope of its original pack of Adobe PageMaker plug-ins while improving the most important of the existing components. Eight new modules have been added to the 10 that debuted in Version 1.0.

For most users, the most significant news in PageTools 2 is that it now works with Adobe PageMaker 6.0 as well as PageMaker 5.0. A smart installer lets you pick which version of PageMaker you're using and places the necessary components where they belong. If you use both versions of PageMaker, simply install PageTools twice: We found no conflicts that resulted from this procedure, even when running both versions of PageMaker at the same time.

PageTools 2 can be bought directly from Extensis for $99.95. All PageTools modules are fat binaries and are Power Mac-native.

Extensis makes a similar collection, called QX-Tools, for QuarkXPress users. When we reviewed QX-Tools 1.0 last year (see 10.16.95, Page 36), we found it to be an elegantly designed product hampered by bugs. By comparison, we couldn't find any significant bugs in PageTools 2. All 18 plug-ins did what they were supposed to in the prescribed manner.

> Extensis has clearly learned from its experience: PageTools 2 is more complete, stable and fully documented than its earlier incarnation.

Don't let's start

One odd part of PageTools left over from Version 1 (see 10.10.94, Page 55) is the Start PageTools application, installed in the Startup folder. This invisible application runs in the background, awaiting PageMaker's launch to make PageTools active immediately. It's possible to delete (or move) Start PageTools and forgo its minor convenience: If you do so, you'll have to manually launch PageTools when desired by choosing a component under PageMaker's Utilities menu.

This strange setup epitomizes the stilted way that PageMaker forces plug-ins to operate and emphasizes that it is not truly built on an extensible architecture. Whereas QuarkXTensions are scriptable, immediately accessible and well-integrated into the main application, PageMaker plug-ins are generally inconvenient, slow and of limited flexibility.

Given the added difficulty of developing for Adobe's platform, Extensis has done a remarkable job of matching many of the features of its QX-Tools to the new PageTools. The PageBars plug-in — a customizable tool bar that is at the heart of the package — is a good example: PageTools 1 allowed only one tool bar, was far less customizable and anchored itself against the edge of the screen à la Microsoft Word 5.x. QX-Tools introduced multiple tool bars as floating palettes and beefed up their customization options.

With PageTools 2, PageBars mostly matches QX-Bars' versatility, but even here it's not a perfect duplicate. Specifically, buttons on the Toolbox Plus palette do not remain pressed and thereby indicate the tool being used. Extensis said that flaws in PageMaker kept this feature from working reliably, so the company removed it.

Trivial pursuits

While all of PageTools 2's plug-ins work as they should, it's worth noting that some of them are far less ambitious than their XPress cousins.

Take PageScaler, the new plug-in that grows or shrinks groups of objects while maintaining their relative positions. The QX-Tools version, called QX-Scaler, offers control of 16 aspects of the objects to be scaled, allowing you to choose to enlarge (for example) the point size of text but not its paragraph attributes. With PageScaler, you control only objects' line weight, text and graphics size. Similarly, PageTools' configuration options are weak when compared to QX-Tools', being limited mostly to selecting hot-key combinations.

Of the other plug-ins, some are trivial (PageTabs, PageTips) and some are only minor improvements over PageMaker's built-in capabilities (PageAlign, PageCaps). Even so, gems sparkle among the 18 plug-ins, making PageTools well worth its price.

PageScaler, despite its limitations when compared with the XPress version, gives designers tremendous freedom to change the appearance of layouts. PageColors is a boon to anyone working with complex, multicolor pieces (such as catalogs), and PageMarks automates one of the most tedious aspects of print production by letting you easily create crop and registration marks. PagePrinter's option of outputting only those pages that have been changed could save hundreds of dollars in film costs, although its tracking capabilities are slightly incomplete. Finally, PageGuides and PageMover speed page setup and production.

Thumb twiddling

Whether it's Adobe's or Extensis' fault, expect to wait when using some of PageTools' plug-ins. PageThumb was the worst of the offenders, often taking several seconds to show a complex page — and holding the machine hostage while it did. Extensis offers options to speed the process, but still, the slowdown is noticeable.

As before, Extensis' documentation is strong, and the new manual is more logically arranged than the previous one. Technical support is outstanding: They not only answered our questions but called us back later to clarify some subtle points.

Conclusions

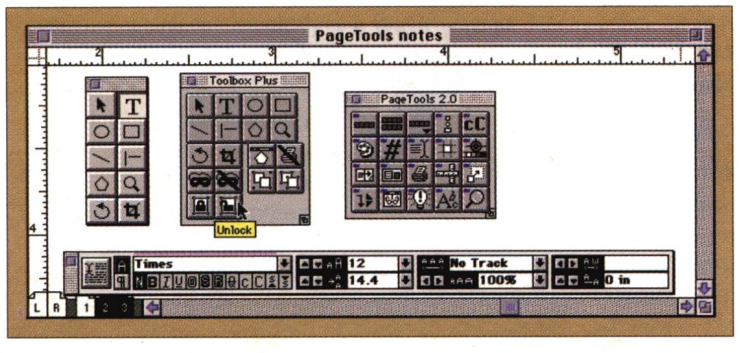
Extensis has clearly learned from its experience: PageTools 2 is more complete, stable and fully documented than its earlier incarnation. As with any compilation work, you'll find PageTools to be a mixed bag of the sublime and the pointless and may well find that you use only a few of the 18 plug-ins.

The strongest ones seem to have been inherited from PageTools 1; therefore, Version 1 users will have to decide whether the improved PageBars and the new plug-ins are worth the upgrade price. New purchasers should have an easier choice. All serious PageMaker users, however, will find something valuable in PageTools 2, and those nuggets make its purchase a worthwhile investment.

Upgrades from Version 1 are free if purchased after Sept. 1, 1995; $49.95 otherwise.

Extensis Corp. of Portland, Ore., can be reached at (503) 274-2020 or (800) 796-9798; fax (503) 274-0530; info@extensis.com.

— By Tom Geller



It is arguable whether PageTools' Toolbox Plus (part of the PageBars plug-in) is an improvement over the built-in Toolbox of PageMaker 6.

Day-Timer Organizer 2.0

PIM shows promise but needs a Mac make-over

Overall value ♦♦

With the release of Day-Timer Organizer 2.0, Day-Timer Technologies has shown that it's possible to build a bridge between print and electronic organizers and even cross-platform networks while providing a consistent, thoughtful approach to information management. Unfortunately, the application's turgid performance and Windows look and feel may keep most personal information manager users from paying the toll.

Day-Timer Organizer 2 — with an estimated street price of $59.95 — is the first version for the Macintosh. It is not a native Power Mac application.

Daydream believer

Day-Timer tracks schedules in multiweek (monthly), weekly and daily views. You can also record Tasks, Addresses, Phone Calls, Notes, Expenses and Messages. Reinforcing the appointment book metaphor is a loose-leaf binder interface; you can hide this, however, through the Preferences dialog box.

You manage and display data types via Day-Timer's consistent list interface. While many products offer columns that can be resized in such a list, Day-Timer also lets you resize rows, which is handy for viewing descriptions of events. To edit Day-Timer list items, you must double-click them within a dialog box. This is unlike Now Software Inc.'s Now Contact, where you can just click within the cells. Day-Timer's Time Data Entry dialog box, however, is remarkably flexible. When scheduling events, you can type in days of the week, as well as terms such as "Tomorrow" and "Next Thursday." The time fields are smart about work hours; if you schedule a meeting at 3:00, the field defaults to p.m.

Entry level

You can add entries by choosing a data type from a dialog box or by double-clicking an entry. You can link these to other entries via drag-and-drop, but you

See Day-Timer, Page 30

When it comes to rating multimedia monitors,

MacUser *magazine recently put some of the leading multimedia monitors through their paces. They performed lab tests on image and sound quality. They stared at test documents, line art and scanned images. They played their favorite CD's at various levels. They fiddled with knobs and on-screen controls. And they researched street prices and warranties.*

After all the results were in, the ViewSonic 17GA 17" (16.0" viewable) PerfectSound™ multimedia monitor was singled out as the "Best Buy."

No wonder. An entirely new technology creates the ultimate screen image–maximum resolution of 1,280 x 1,024, refresh rates as high as 160Hz, and razor sharp screen definition.

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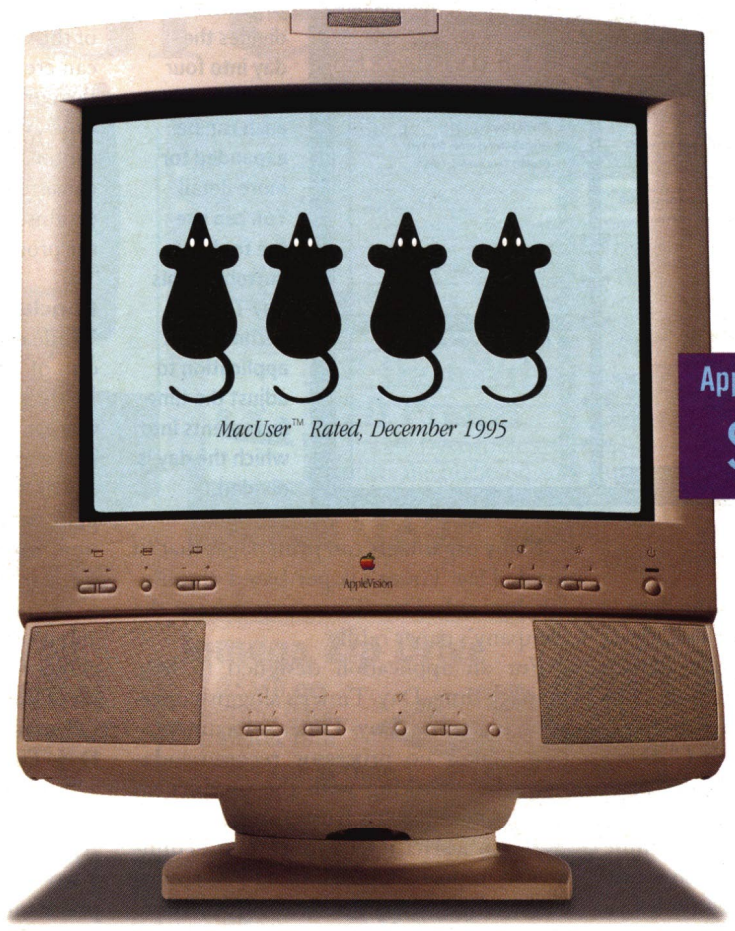
And the 17GA is so attractively priced, it's like getting the multimedia feature for free. Several competitive models cost as much but are not even multimedia monitors.



AppleVision® 1710AV
$1159*

mice are nice but checks are better.

ViewSonic® 17GA
$850*

Rather than toot our own horn, perhaps we should refer you to MacUser *magazine: "A real multimedia bargain," they said, "the ViewSonic 17GA offers solid image quality, warm colors, fine-sounding audio and a slew of easy-to-use on-screen controls." So when you're ready to buy, remember this: Many 17" (various viewable) multimedia monitors come with mice, but only the ViewSonic 17GA has been selected as* MacUser *magazine's "Best Buy."*

MacUser RATED DECEMBER 1995

+/OUTSTANDING •/ACCEPTABLE –/POOR

RATING	PRODUCT	PRICE	SUPPORT	IMAGE QUALITY	SOUND QUALITY
♦♦♦♦	**ViewSonic 17GA**	•	•	+	•
BEST BUY	A real multimedia bargain, the ViewSonic 17GA (estimated street price, $850) offers solid image quality, warm colors, fine-sounding audio, and a slew of easy-to-use on-sreen controls—all at a competitive price. The stylish case will also make you the envy of your office mates.			•	
♦♦♦♦	Apple Apple Vision 1710AV	–	•	+	+
♦♦♦½	IBM 17S/S	–	•	•	+
♦♦♦½	Nokia 447W	•	•	+	–
♦♦♦½	Panasonic Pana Media 17	•	+	•	•
♦♦♦	Philips 17B	•	•	•	–
♦♦½	Philips Brilliance 15A	•	•	•	–

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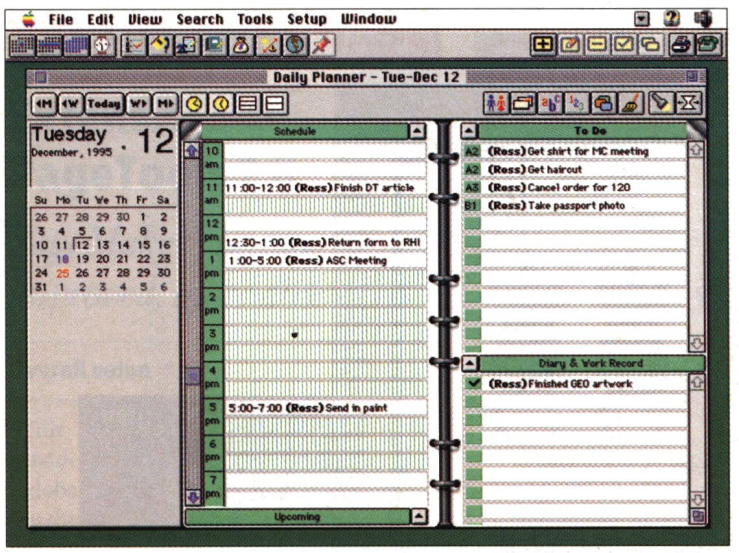

File Edit View Search Tools Setup Window
Daily Planner - Tue-Dec 12
Today
Tuesday
December, 1995 · 12
Schedule
11:00-12:00 (Ross) Finish DT article
12:30-1:00 (Ross) Return form to RHI
1:00-5:00 (Ross) ASC Meeting
5:00-7:00 (Ross) Send in paint
To Do
A2 (Ross) Get shirt for MC meeting
A2 (Ross) Get haircut
A3 (Ross) Cancel order for 120
B1 (Ross) Take passport photo
Diary & Work Record
(Ross) Finished GEO artwork
Upcoming

Day-Timer Organizer 2.0 divides the day into four resizable panes; each can be expanded for more detail. You can use the tool-bar buttons in this Day-Timer Technologies application to adjust the time increments into which the day is divided.

Day-Timer

From Page 28

can't perform look-ups for existing data.

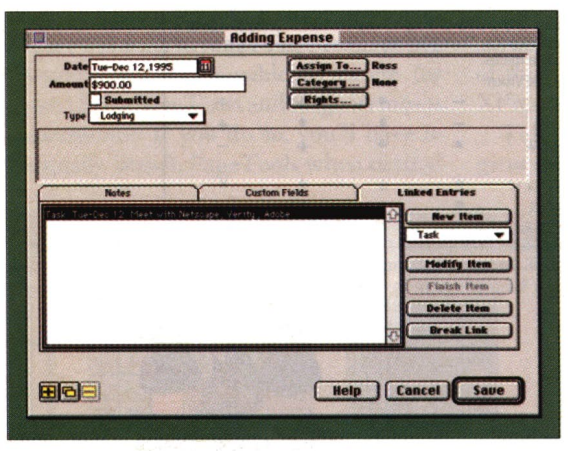
True to its name, Day-Timer's strongest calendar view is the Daily Planner, which neatly displays the day's schedule, upcoming events, the to-do list and a diary-work record in two sets of panes. Clicking the Maximize button expands the pane to fill the view. Daily Planner lets you adjust the daily schedule from 15-minute to one-hour intervals. You can also create a simple list of the day's activities, a space-saving feature many calendar programs omit.

Day-Timer's other views are functional and consistent, but less impressive than Daily Planner. The Monthly Planner cleverly doubles as a multiweek view by combining a scroll bar with tabs for each month. There is no support for multiday events or banners, though.

Day-Timer can track a wealth of fielded information about contacts. Its Adding Address window provides 10 dialog tabs for contact information, including six phone numbers and four e-mail addresses; there are also 12 custom fields. Unfortunately, there is no way to see all the information about a contact at once, and tabs don't indicate that they contain data.

Wasted time

The ExpenseOrganizer, an expense-tracking feature, is especially helpful while traveling. Day-Timer is one of the only PIMs to treat expenses as their own data type.



The integrated ExpenseOrganize is one of Day-Timer's most appealing features for travelers. Items can be linked to expenses or created from within the expense editor.

Many organizers can print pages that fit inside Day-Timer's paper-based organizers, but only Day-Timer can mirror the company's paper refills.

For an application designed to help manage time, Day-Timer's sluggish operation is a crime. Day-Timer's documentation makes no processor recommendations, but working with the product on even a Quadra 700 is frustrating.

On a Mac IIci, it took more than 20 minutes to import a tab-delimited 200-record contact file with bare address information. Our patience was rewarded with a list of blank records even though the import log listed only several problematic records. Deleting large numbers of records also required a lengthy wait. A call to technical support revealed that Day-Timer supports only comma-delimited text. Version 2.0.3, a free maintenance update, solves this problem and addresses other issues, such as speed and printing.

When you make a new database, Day-Timer creates 11 files with three-letter extensions in the Day-Timer folder, none of which may accurately reflect the name of your file. If you move your database to another machine you'll have to round up all these files for transport.

Day-Timer unexpectedly quit once during our testing and twice refused to launch, once crashing the computer and once requiring a reinstallation.

Documentation and support

Day-Timer ships with a Getting Started Guide and a manual; the former is heavily illustrated with annotated pictures. An on-line help system provides hypertext and search capabilities. We'd like to see balloon help or ToolTips for the buttons on Day-Timer's often cryptic tool bars, especially for the five functional search methods — Assignee, Category, Word, Priority and Type — which could be simplified.

Day-Timer provides support via toll call and its own forums on America Online and CompuServe. Phone support, which still seems to be coming up to speed in the Mac world, required a 15-minute wait with the same droning announcement repeated about every 30 seconds.

While the Quick Reference on the back of the Getting Started Guide states that you can create a new appointment by dragging the cursor along the grid from start to end times, we were unable to do this in the application. Technical support confirmed the inconsistency, and our representative promised to communicate our problems to the programmers.

Conclusions

While it's refreshing to see a product break out of the paradigms common to Mac PIMs such as Now Contact and Claris Corp.'s Organizer, Day-Timer Organizer 2.0 bears many marks of a Windows developer's first Mac foray — buggy operation, poor performance, mystery file proliferation, minimal keyboard equivalents and unclear tool-bar buttons.

While its interface will seem comfortable to users of paper organizers, it's a poor choice for those who need to manipulate a lot of data within their PIMs. With a Mac OS make-over and a shot of adrenaline, Day-Timer could be an attractive choice.

The network version of Day-Timer, which we did not review, can operate over AppleTalk or Novell NetWare LANs. Two- to 50-user versions are available at prices ranging from $119 to $2,295.

Day-Timer Technologies of San Mateo, Calif., is at (415) 572-6260 or (800) 225-5005; fax (415) 572-9675; sales@dtt.daytimer.com.

— By Ross Scott Rubin

OneClick 1.0

Scripting more palatable for Mac novices and pros

Overall value ◆◆◆◆

WestCode Software Inc.'s OneClick is something of an anomaly. It's a complex scripting tool that should appeal to both experienced and beginning Macintosh users.

The $129 package functions as a palette-based application launcher, à la Natural Intelligence Inc.'s DragStrip, but it's much more: Its built-in scripting language gives it more in common with CE Software Inc.'s QuicKeys than with DragStrip or the myriad other launch utilities available as shareware.

For users who are uncomfortable writing scripts themselves, OneClick will only be as good as the several ready-made solutions bundled with it. Fortunately, these scripts — accessed mostly via buttons — are generally very good. They include common user actions (opening the Control Panels folder, switching between open applications) as well as functions unique to OneClick (tiling windows or dialing a phone number, for example).

Buttons galore

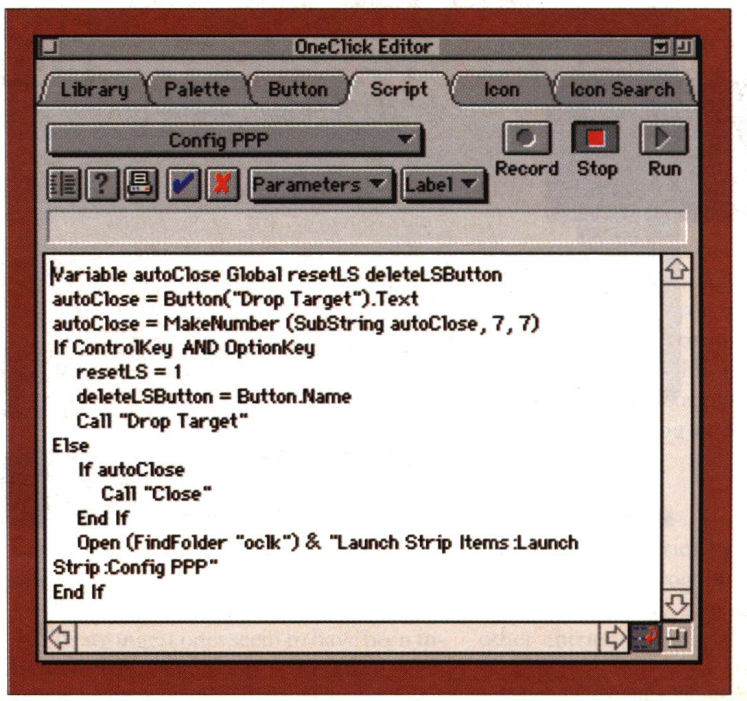
Buttons sit on palettes that can be global (available in every program) or appear only when a particular application is called. WestCode Software includes application-specific palettes for the Finder; SimpleText; Claris Corp.'s FileMaker Pro, ClarisWorks and MacWrite Pro; QuarkXPress; and Deneba Software Inc.'s Canvas.

As is the case with most automation tools, we found many of the "shortcuts" OneClick provided to be more trouble than they were worth. (Does anybody find it easier to click on a pair of scissors for Cut than to hit Command-X?) The company states that palettes for other applications will be available in future releases, via a disk-subscription service and through its Web site.

WestCode includes several other palettes that show off the capabilities of EasyScript, OneClick's scripting language. Three of them appear on the desktop by default. First is the System Bar, similar to Apple's Control Strip or the shareware utility Desktop Strip. (OneClick will accept Control Strip modules, although importing them requires a minor work-around.)

Second is the Task Bar, which shows active processes and lets you switch from one to another by clicking on its icon. Finishing

See OneClick, Page 32



This script was automatically created by WestCode Software's OneClick when a control panel was dropped on the Launch Strip. Note the subroutine that lets you remove the button by holding the Control and Option keys while clicking on it.

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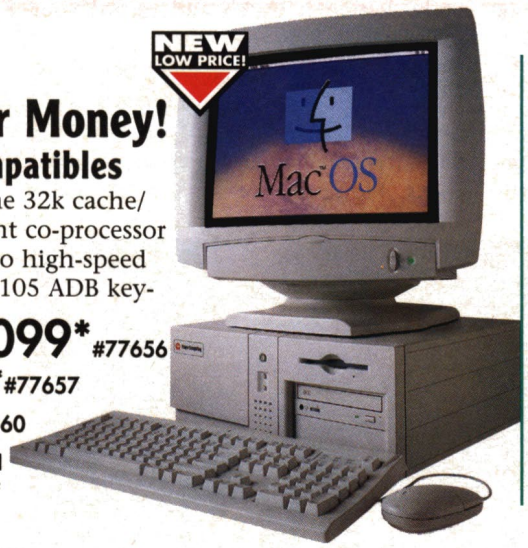

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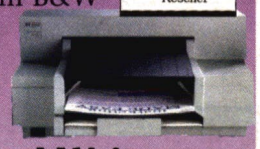

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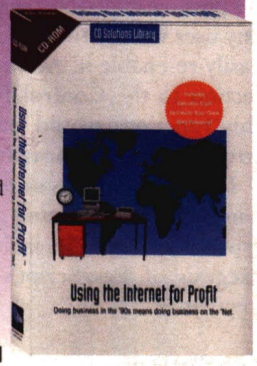

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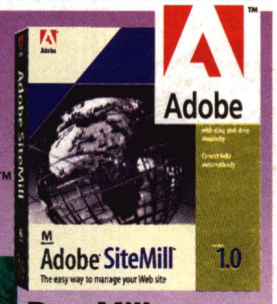

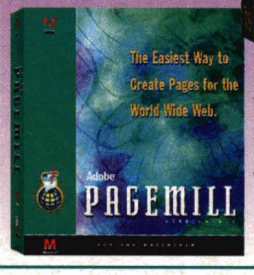

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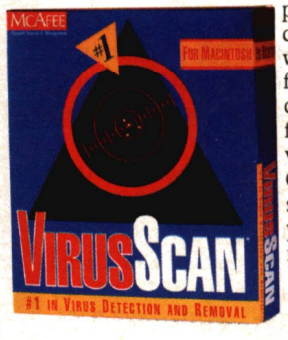

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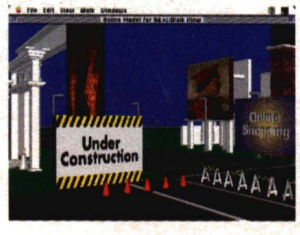

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OneClick

From Page 30

out the triumvirate is the Launch Strip, a utility that makes accessing commonly used documents, folders, applications and system extensions more convenient.

The latter two — the Task Bar and Launch Strip — together duplicate most of the functions of the $59.95 DragStrip 2.0 (see 08.14.95, Page 39), as well as that of downloadable products such as Malph, HoverBar and QuickLaunch. One feature not found in OneClick's included palettes is a system of storing and retrieving drag-and-drop clippings: This could be scripted, however, and the company said it may write this improvement into a palette.

Scripting for the masses

If you need only a palette-based application launcher and control tool, a combination of HoverBar and Desktop Strip will do the job for less than one-fourth of OneClick's price. But OneClick's advantage lies in its scripting language, which can be programmed either directly or by letting it watch and record your movements. Few recorded scripts will work without tweaking: OneClick is just as inaccurate at tracking user actions as QuicKeys and AppleScript are, especially when it comes to mouse drags or positional clicks. However, we found OneClick's text-based editor to be far and away more sensible than the object-based editor of QuicKeys, a kludgy mess that involves a seemingly endless series of modal dialog boxes. (Incidentally, OneClick can call QuicKeys and AppleScript routines from within EasyScript.)

All OneClick scripts — including those on the System Bar and other provided palettes — can be edited via the Script Editor, a component of the OneClick Editor. Other components of the OneClick Editor let you control the appearance and behavior of buttons and palettes. For example, you can control the contents of balloon help or where associated text should appear. There's also an Icon Editor and — to extract icons from existing programs and documents — an icon search utility.

OneClick's features all bode well for the system administrator looking to put complex operations within a button-click of naive users. WestCode seems to have anticipated this need and offers OneClick in a variety of site licenses.

> OneClick's features bode well for the system administrator looking to put complex operations within a button-click of naive users.

Unfortunately, security and foolproofing are not addressed well enough. While it's possible to disable the OneClick Editor, any user who opens the Control Panel can easily re-enable it. Adding password protection to the Control Panel (or at least this function) would make OneClick a stronger tool for Mac managers.

Documentation is unusually good, with a user guide, a scripting guide and several types of on-line help, including a complete exegesis of EasyScript's more than 120 keywords.

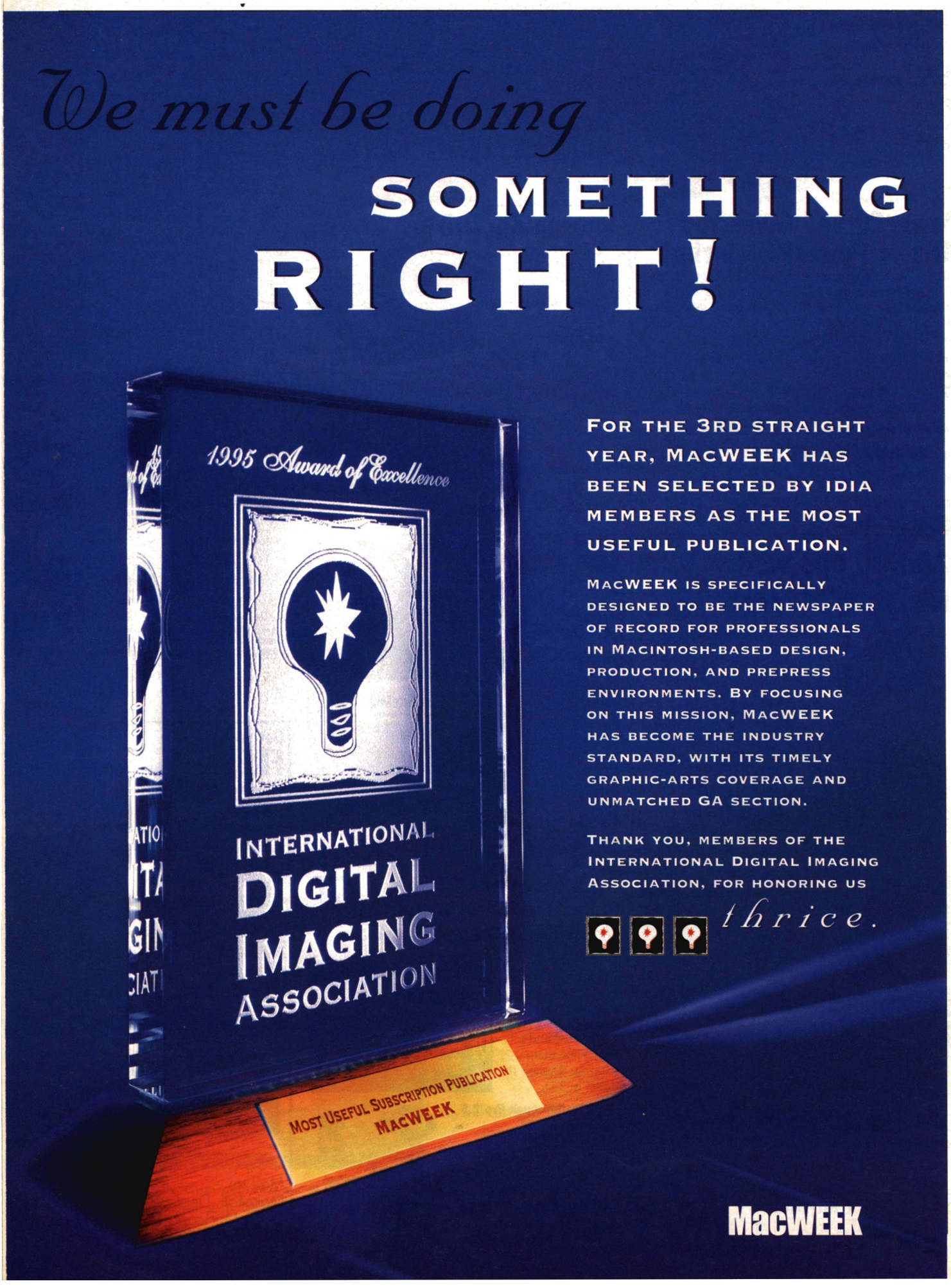
Conclusions

If OneClick merely lived up to its billing as a program launcher, it would be an unremarkable and overpriced utility.

Once you scratch the surface, however, it shows itself to be a unique and handy tool for those with the dedication to write scripts for it. OneClick is not merely another in a long line of similar utilities. It takes the best from those that came before and puts it in a consistent and complete package.

OneClick can also be purchased in a five-pack for $372.50; 10-pack, $695; 50-pack, $2,975; 100-pack, $4,950.

WestCode Software Inc. of San Diego can be reached at (619) 487-9200 or (800) 448-4250; fax (619) 487-9255; westcode@westcodesoft.com; http://www.westcodesoft.com. — *By Tom Geller*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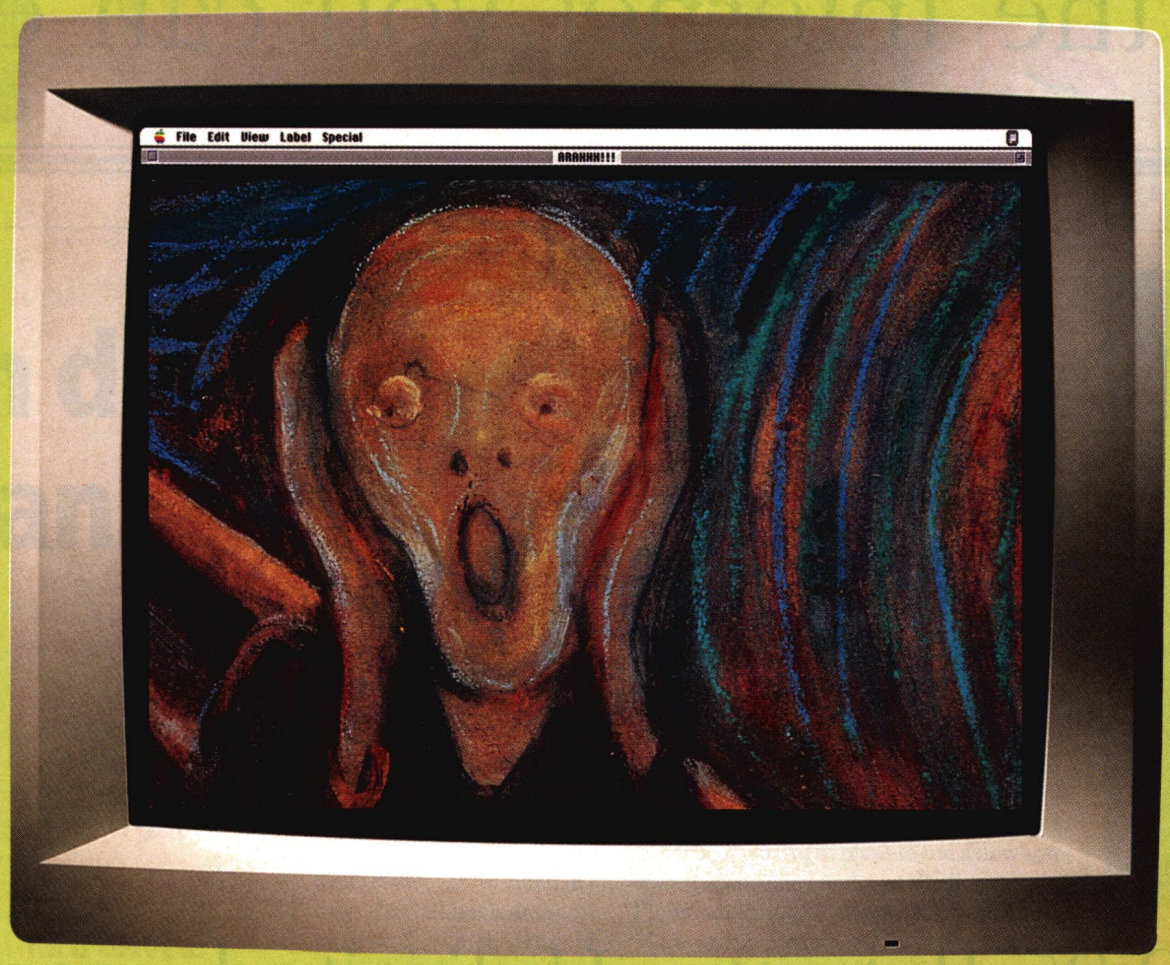

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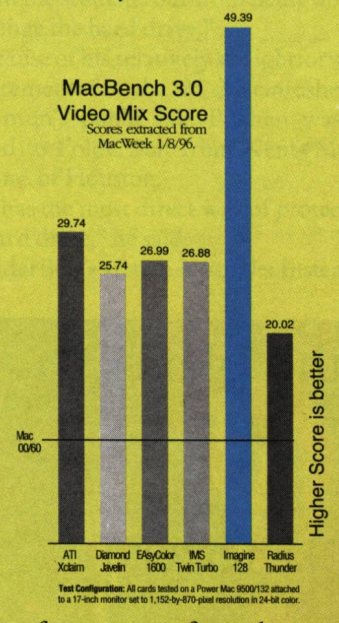

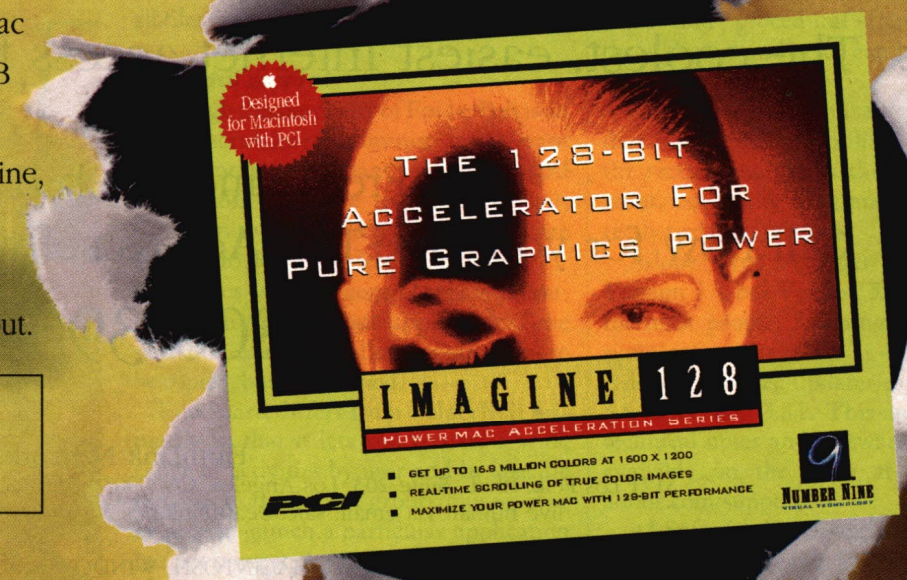
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SECURITY

Batten down the hatches: Lab managers protect Macs

By Larry Stevens

Public academic computer labs are a security manager's nightmare. They're often understaffed and overcrowded and need to be available around the clock. Every day, each Mac is accessed by multiple students — not the most disciplined of populations. But even though the danger might be great, many administrators find the solution relatively simple — simpler, in fact, than the procedures used in commercial settings.

In a public Mac lab, security is as basic as keeping users from rearranging the hard drives.

"We didn't need a structured hierarchy of users with an array of different privileges," said Dan Buchan, academic computing specialist at Dickinson College in Carlisle, Pa. "All we wanted was a way to lock all the students out from being able to rearrange the hard drive."

Because of his relatively straightforward requirement for the 25 Macintoshes at Dickinson's public lab, Buchan was attracted to FolderBolt from Kent◆Marsh Ltd. Inc. of Houston.

"It has the most direct way of protecting the hard drive," he said.

FolderBolt's system is simple: Instead of requiring you to assign privileges to different users or groups, as do many other security programs, FolderBolt allows you to lock up any or all folders. Each locked folder may require a different password to unlock. However, in Buchan's case, they all have the same password, which only he and a few other administrators know.

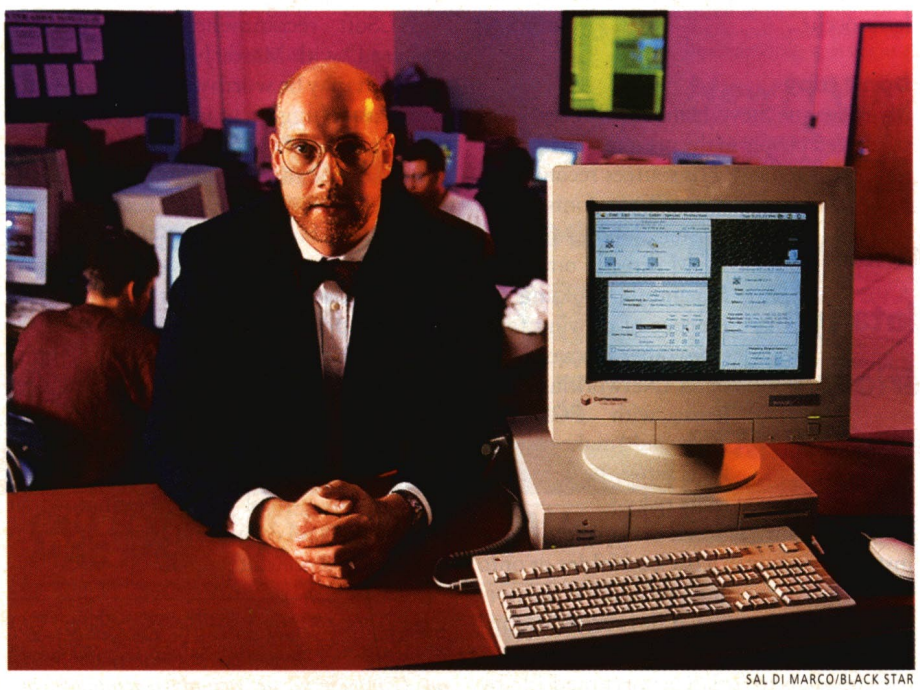
Before Buchan installed FolderBolt, some students would make changes to Control Panels items, create nauseating background designs, mis-set the clock or calendar, add system extensions, and move or even trash applications.

"It takes us a half hour or more each day to get each Mac back to its original condition," Buchan said.

Now, with FolderBolt, users can make absolutely no changes to the hard drive. If they want to save anything, they save onto floppies. In fact, the only customizing users are allowed to do is to change the preferences dialog box within applications, but those changes last only one session. Buchan created a macro for each application that automatically resets the preferences to a specified condition each time the application is launched.

Mark Plowman, Mac support specialist at the University of Missouri at Kansas City, also uses FolderBolt, but his use of the application is a bit more complex than Buchan's. When a department plans to use a new software package, it purchases the licenses and Plowman installs the applications on the 30 Macs in his computer lab. Sometimes instructors don't want their students to access a new application until a certain point in the semester. In those cases, the application is placed in a locked folder that requires a password. When the teachers deem the students ready to work with the new software, they reveal the password. "It's a good way to stop students from experimenting with something they're not ready for," Plowman said.

Plowman also used to set FolderBolt so students could not make changes to the hard drives. But now many downloaded Internet files are too large to be saved directly onto floppies, so Plowman provides a single unlocked folder where students can save data. At the end of their session, however, they have to transfer the files to a floppy, using a backup utility to save a file to multiple floppies if necessary. Every few days, Plowman visits each Mac and trashes all files in this public folder.



SAL DI MARCO/BLACK STAR

According to the University of Delaware's Steve Timmins, the advantage of using FileGuard is that users can access applications from the Finder, but they are copy-protected and can't be moved.

Powerful control

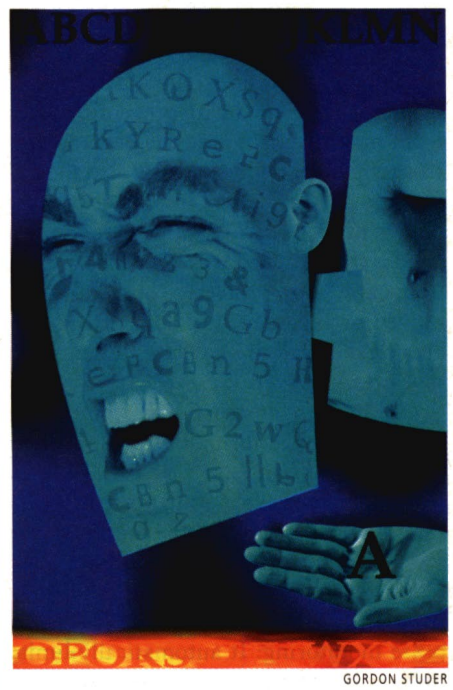
Although the simplicity of FolderBolt is an asset, sometimes administrators want more control. Buchan uses FileGuard from ASD Software Inc. of Montclair, Calif., on two Macs to which students are allowed to download freeware.

"It gives us a lot of control over what students can do with our applications," he said. For example, it allows applications to be copied, but not trashed.

FileGuard differs from FolderBolt primarily in that it lets you control a wide range of activities by user and by specific file. For example, one group of users may be able to launch a particular application but not move it. Another group could copy and move that application.

Steve Timmins, site director at the engineering computer lab at the University of Delaware in Newark, uses FileGuard in his 12-Mac lab, which is open 24 hours a

See Solutions, next page



GORDON STUDER

MACINTOUCH

RIC FORD

Fonts remain a black art, so we bone up on rites

Fonts live alongside SCSI devices in the world of Macintosh voodoo, and PCI-based Macs brought new problems to people who work with large numbers of fonts. A combination of the latest software updates and procedural rites developed through trial and error can help keep the demons at bay.

Keeping application software up-to-date is important for reliability, given all the recent changes in the Mac environment, but utility programs are more directly tied to font issues.

Adobe Type Manager is currently at Version 3.9, but Version 3.8.2 will suffice for most people. Running previous versions on recent Macs is not advisable. Adobe has a free updater to bring ATM 3.8 to Version 3.8.2. This and other tips, technical notes and software updates are available on the Web at http://www.adobe.com/support/.

ALSoft Inc.'s MasterJuggler 1.91, a minor update released for Power Mac 9500 systems, handles font management well with both old and new Macs.

Symantec Corp.'s similar Suitcase has been problematic, especially on PCI-based models, where it sometimes fails to deliver

See MacInTouch, next page

SOLUTIONS

From previous page

day. He said he likes FileGuard because "It's very stable and secure." Since the population of users is among the most computer-sophisticated on campus, "We don't want a [security] product that they can get around," Timmins said.

Like many administrators, Timmins is primarily concerned with preventing users from making changes to the desktop and from copying applications. He said the advantage of FileGuard's interface is that it allows users to access applications in the Finder the standard way. But the applications are copy-protected and can't be moved or renamed. He does provide an area on the hard drive where students can save files, however.

Jeff Nadel, instructional computing consultant at California Polytechnic State University at San Luis Obispo, also uses FileGuard to prevent students from rearranging the desktop. But he prefers to use KeyServer from Sassafras Software Inc. of Hanover, N.H., to prevent applications from being pirated. KeyServer provides license monitoring: It automatically limits the number of simultaneous users who can launch a given application on the network.

"In one area we have 300 Macs," Nadel said. "Without KeyServer we would have had to purchase 300 licenses of Microsoft Office. With it we were able to get away with only 80 floating licenses."

Paula Crog, user services consultant at Colby College in Waterville, Maine, is also concerned about maintaining a stable desktop and preventing applications from being copied. She opted to use Empower from Magna of Campbell, Calif., on the 65 Macs in her lab.

"Once it's set up it's very easy to maintain," she said. For example, it lets her set guest access privileges. Guests do not need a password, and they all have the same access privileges. While Empower lets you set up a three-level hierarchy made up of administrator, users and guests, Crog prefers a simpler structure. "I'm the administrator; everyone else is a guest," she said.

In the past, Crog would occasionally allow student assistants to log on as users with specific privileges. But she found that unless she was careful in assigning privileges to these users, they'd sometimes take advantage of every loophole they could find to expand those privileges.

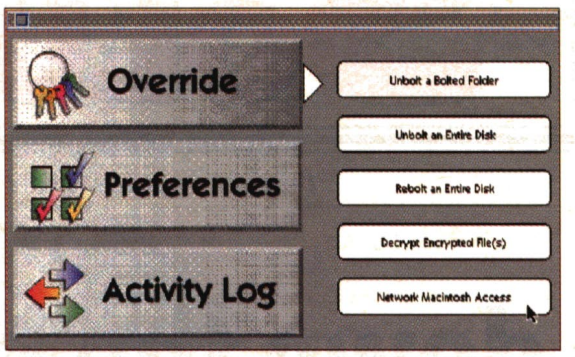
Kurt Bartelmehs, computer coordinator at the geology computer lab at the University of Texas in Austin, describes himself as a take-charge person. That's why he chose UltraShield from usrEZ Software Inc. of Irvine, Calif., which he deemed the most highly functional and complex security system for the Mac. It allows for a four-level hierarchy. While Bartelmehs normally uses only two levels, "It gives us the ability to expand the complexity of our structure if we should need to do so in the future," he said.

Most of the time, students at Bartelmehs' lab launch applications through the Apple menu, since they have no access to applications on the desktop. Bartelmehs does, however, keep two folders on the desktop for students to have temporary storage for their files. But while they can open these folders and place or remove files from them, they can't move, delete or rename the folders.

Flexible but costly

Jim Kotz, technology coordinator at the Thief River Falls, Minn., school district also likes UltraShield for its flexibility in assigning privileges. He has it installed on about 70 Macs districtwide. It allows him to assign different folders to different users; restrict some users to saving only to floppy disks; and provide locked boxes, folders in which users can place files but not remove them.

"There's almost no limit to the types of access privileges we can assign," Kotz said.



The FolderBolt system from Kent◆Marsh lets you lock up any or all folders rather than requiring you to assign privileges to different users or groups.

So why does Kotz have UltraShield installed on only about half of the Macs in his district? "Frankly, it's too expensive for us to buy as many packages as we'd like," he said. As a result, on another 70 Macs, he's using Mac Manager from ELS Inc. of Gainesville, Fla.

Mac Manager works by replacing the Finder with a menu that lets users access only those files, folders and applications the administrator specifies. Users log on using their respective passwords and then are presented with their own menu. While Mac Manager works fine, Kotz said, it doesn't provide the high level of control offered by UltraShield. It also requires users to work with an interface that's different from the standard Mac interface. So Kotz said he's hoping for an educational version of UltraShield, one that eliminates its encryption function (which very few educational labs use) and which comes with a lower price tag.

A product similar in structure to Mac Manager is Apple's At Ease for Workgroups 3.0. Like Mac Manager, At Ease provides users with their own personal desktops, allowing access only to those documents and applications that the administrator deems necessary.

There are two alternative interfaces: The Tabbed Folder interface consists of tiles that represent files. The Restricted Finder interface is almost identical to the standard Mac interface. Each user sees a customized desktop that contains unique locations and Apple menu items. It doesn't, however, provide the kind of comprehensive access control that most lab administrators are looking for.

While some administrators want to move up to a more complex security system, other educational lab managers are moving in the opposite direction.

Two years ago, John Rocchio, systems manager at the University of California at Santa Cruz, ditched his copies of Empower in favor of freeware: RevRdist from Purdue University Computing Center (http://www.purdue.edu/revrdist) along with KeyServer. The latter is for license control and copy protection. RevRdist (pronounced "rev-are-dist" for "reverse remote distribution") is a program for Unix servers that distributes files to remote Macs. While it doesn't prevent the desktop from being changed, it does reset it to a specified condition.

About every other night, Rocchio runs RevRdist, which compares files on a server with those on each Mac. If the Mac files have been altered, they're trashed and replaced with ones from the server. It completely cleans up the Macs' hard drives, removes temp files, relocates application icons and trashes unauthorized applications.

Rocchio said that the fact that RevRdist is free was only one reason he switched to it from Empower. A second is that by using it, he didn't have to change the Mac interface.

"People don't expect to see locked folders or warning messages [from security software] on their screen," Rocchio said. "This eliminates the need for all that. Users can mess with the Mac, but it will always be restored." □

MACINTOUCH

From previous page

outline fonts, crashes or refuses to load. Symantec promises a completely rewritten Version 3.0 in a few months.

Get the patch

Some of the Suitcase problems are addressed in a patcher available in Symantec's on-line support libraries, including CompuServe's Symmac Forum. The update brings Suitcase to Version 2.1.4p3, a 1994 release that is the most reliable version available at the moment.

Reinstalling Suitcase from scratch and applying the patch often solves problems people experience with the product, but something related to Suitcase gradually deteriorates on certain systems, leading to failures days or weeks later. Symantec is still working with customers on isolating this bug in Suitcase 2, while testing to ensure that it is purged from Suitcase 3.

Reader Charles Eicher identified an apparent conflict between Suitcase and Apple's WorldScript extensions. These extensions support such products as the Japanese Language Kit and Chinese Language Kit, but they are installed on standard American configurations by some of Apple's default installer scripts. Removing them fixes Suitcase problems for some people. Symantec promises better multibyte language support in Suitcase 3.

One reader reported that Suitcase worked only after updating ATM to a current level, so that is another option to try if you experience problems.

Fonts, nominally a read-only data type, are mysteriously being corrupted.

Fonts are nominally read-only data, and some are stored in ROM, where they are impervious to change. In an unsolved and widely acknowledged mystery, however, Mac font files are getting corrupted on disk. The results can be ugly, causing crashes, freezes or printing failures in a variety of situations. Mac experts and technical support people are starting to recommend that users reinstall fonts when these sorts of problems occur.

Don't copy

My colleague Steve Hannaford recently interviewed people in the pre-press field about font management. His sources recommend reinstalling fonts from master floppies or CD-ROM directly onto each Macintosh, avoiding the practice of copying fonts from other Macs or other disks. (Networking problems with PCI-based Macs could make copying fonts across the wire especially risky.)

Another suggestion is to duplicate clean-installed fonts into a backup folder or onto an extra disk for quick recovery if the normal fonts get corrupted. It is easier to simply copy a full, fresh set from a handy backup than to isolate a corrupted file by trial-and-error font loading. For added insurance, use your hard drive to hold backup fonts rather than relying on a removable cartridge.

ALSoft recommends opening fonts "Shared" with MasterJuggler, a read-only mode. It may be worthwhile, with or without MasterJuggler, to lock font files in the Finder. Daniel Azuma's shareware FileTyper 4.2.2 can lock a whole batch of files at once.

Finally, both Suitcase and MasterJuggler support compression of font files, but this is a tricky business that can cause files to appear corrupted when they are not. The two utilities do not use the same compression scheme, so MasterJuggler-compressed files are not usable with Suitcase and vice versa. Neither compressed format is usable without its utility.

You can e-mail Steve Hannaford at stevehann@aol.com, and Daniel Azuma is at dazuma@cco.caltech.edu. □

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	11 ms Seek	5400 RPM	128K Buffer	2 Year Warranty	
√	**850 MB**	*Value!*		195	255
	11 ms Seek	5400 RPM	128K Buffer	2 Year Warranty	
	1080 MB	Fireball		265	335
	11 ms Seek	4500 RPM	128K Buffer	3 Year Warranty	
	2.2 GB	Capella		595	655
	8.5ms Seek	5400 RPM	1024K Buffer	5 Year Warranty	
	2.0 GB	Atlas		785	845
	8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	4200 MB	Grand Prix		985	1045
	8.6 ms Seek	7200 RPM	512K Buffer	5 Year Warranty	
	4.3 GB	Atlas		1075	1135
	8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	

Fast & Wide SCSI AV Drives

	2.0 GB Atlas			885	985
	8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
√	**4.2 GB Grand Prix**			1175	1275
	8ms Seek	7200 RPM	512K Buffer	5 Year Warranty	

- PowerStor™ active termination with the flip of a switch.
- 5 Year 24 Hour Replacement Warranty
- Optional Fixed Daisy Chain Connector... Puts an end to your cable nightmares
- On/Off switch Conveniently located on the FRONT of our cabinet.
- Power and Activity light located on front bezel

Featured Products

Quantum 127 MB *Powerbook Drive*	$119	$195
Q Daytona,4500RPM, 17 ms seek, 128K cache, 1 year warranty		
Quantum 341 MB *Powerbook Drive*	$169	$235
Q Daytona,4500RPM, 17 ms seek, 128K cache, 1 year warranty		
IBM 540 MB *Powerbook Drive*	$245	$325
IBM TravelStar12 ms Seek 4900 RPM 128K Buffer 1Year Warranty		
IBM 540 MB *DeskStar*	$175	$255
IBM540, 4500 RPM, 9ms seek, 128K cache, 5 year warranty		
IBM 1.2 GB *DeskStar With MR Heads... FAST!*	$265	$325
IBM 31080, 5400RPM, 8.9 ms seek, 5 year warranty		
Fujitsu 2.1GB	$685	$745
F2915s, 7200RPM, 9ms seek, 5 year warranty		
Quantum Atlas 4.0GB	$1075	$1135
Q34301, 7200, 8.6ms seek, 512K cache, 5 year warranty		
Seagate 9.0GB	$1995	$2095
ST410800, 5400RPM, 11ms seek, 512K cache, 5 year warranty.		

Seagate

	1.2 GB Hawk			$385	$445
	9 ms Seek	5400 RPM	512 KBuffer	5 Year Warranty	
	2.4 GB Hawk			785	845
	9 ms Seek	5400 RPM	512K Buffer	5 Year Warranty	
	2.5 GB Barracuda 2			765	825
	8 ms Seek	7200 RPM	1024K Buffer	5Year Warranty	
	4.3 GB Barracuda 4			1185	1245
	8 ms Seek	5400 RPM	1024K Buffer	5 Year Warranty	
	2.5 GB Fast & Wide Barracuda 2			825	925
	8 ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	4.3 GB Fast & Wide Barracuda 4			1245	1345
	8 ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	9.0 GB Elite			1995	2095
	11 ms Seek	5400 RPM	512K Buffer	5 Year Warranty	
	9.0 GB Fast & Wide Elite			2195	2325
	11 ms Seek	5400 RPM	512K Buffer	5 Year Warranty	

90 Day Performance Guarantee on all ProDirect Hard Drives... Call

MICROPOLIS

	Capacity			Int.	Ext
√	**2.1 GB** • *Also Available in Fast & Wide SCSI 2*			625	685
	Fast SCSI 2 8 ms Seek	7200 RPM	512K Buffer	5 Year Warranty	
	4.3 GB • *Also Available in Fast & Wide SCSI 2*			1015	1075
	Fast SCSI 2 8 ms Seek	7200 RPM	512K Buffer	5 Year Warranty	
	9.0 GB • *Also Available in Fast & Wide SCSI 2*			1935	2035
	Fast SCSI 2 11 ms Seek	5400 RPM	512K Buffer	5 Year Warranty	

GOLD Series AV Drives *Recommended most for AV work*

	2.1 GB • *Also Available in Fast & Wide SCSI 2*			675	735
	Fast SCSI 2 8.5 ms Seek	7200 RPM	512K Buffer	5 Year Warranty	
	4.3 GB • *Also Available in Fast & Wide SCSI 2*			1110	1170
	Fast SCSI 2 8.5 ms Seek	7200 RPM	512K Buffer	5 Year Warranty	
	9.0 GB • *Also Available in Fast & Wide SCSI 2*			2035	2135
	Fast SCSI 2 11ms Seek	5400 RPM	512K Buffer	5 Year Warranty	

All Micropolis hard drives are covered by a 5 year advance replacement warranty. If at anytime during the warranty period your drive should fail it can be replaced in 24 hours. NO WAITING FOR REPAIRS!

IBM

IBM drives utilize IBM's advanced Magneto-Resistive(MR) disk technology which increases the amount of data stored per disk surface and reduces the number of disks and heads making the IBM series more slim-lined , reliable & Faster

	540 MB			$175	$235
	9 ms Seek	5400 RPM	128K Buffer	5Year Warranty	
√	**1.2 GB** *DeskStar*			265	325
	11 ms Seek	4500 RPM	512K Buffer	5 Year Warranty	
	2.2 GB *UltrStar*			755	815
	8.5ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	4.3 GB *UltrStar*			1355	1405
	8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	5.3 GB *UltrStar*			1375	1435
	8ms Seek	5400 RPM	1024K Buffer	5 Year Warranty	

FUJITSU

	530 MB			$175	$235
	9 ms Seek	4500 RPM	256K Buffer	3 Year Warranty	
	1.2 GB			285	345
	11 ms Seek	5400 RPM	512K Buffer	3 Year Warranty	
	2.1 GB			685	745
	8.5ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
	4.2 GB			1075	1135
	8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	

SyQuest TECHNOLOGY

DRIVES			CARTRIDGES	
Capacity	*Model*	*External*	*Capacity*	*Price*
88 MB	SQ5110C	$345	**44 MB**	$40
135MB	SQEZ135	225	**88 MB**	45
200 MB	SQ5200	395	**135 MB**	19
270 MB	SQ3270	405	**200 MB**	70
			270 MB	58

Memory Products

CALL FOR THE BEST PRICES ON ALL MAC MEMORY!

PCI/NUBUS FAST & WIDE ACCELERATORS

Atto Express PCI $345

Single channel RISC based PCI to Fast/Wide SCSI 3 accelerator card for Apple's PCI based computers. Ideal solution for your audio, video, prepress, and real time applications. Transfer rates up to 20MB/sec.Formatting software included.5 year warranty. Call for Disk Array Solutions! Also vailable in Dual Channel.

Atto Silicon Express 2 $485

SCSI 1 & 2 support,transfer rates up to 10.0 MB/sec.,supports multiple block sizes,takes advantage of parallel processing capability.Ideal for graphic design, multimedia applications and More!

√ Atto Silicon Express 4 $829

Fast/Wide 16BIT SCSI 2 accelerator card for Apple's Nubus based computers. Supports fast/wide SCSI 2 (16 Bit) transfer rates up to 20MB/sec. and fast SCSI 2 (8 Bit) transfer rates up to 10 MB/sec. Full 16 Bit wide support for the latest drives and disk arrays. Fully compatible with all existing SCSI 1 drives. Formatting software is included.5 Year Warranty.

New! FWB JackHammer $455

Fast/Wide 16BIT SCSI 2 accelerator card for Apple's Nubus based computers. Supports fast/wide SCSI 2 (16 Bit) transfer rates up to 20MB/sec. and fast SCSI 2 (8 Bit) transfer rates up to 10 MB/sec. Full 16 Bit wide support for the latest drives and disk arrays.

New! FWB PCI JackHammer $385

Single channel RISC based PCI to Fast/Wide SCSI 3 accelerator card for Apple's PCI based computers. Ideal solution for your audio, video, prepress, and real time applications. Transfer rates up to 20MB/sec.Formatting software included.5 year warranty. Call for Disk Array Solutions! Also vailable in Dual Channel.

REMUS Disk Array RaidLevel 0 - 5 $Call

Customized PLUG & PLAY RAID Solutions available for all music and video editing programs. All Hard Drive firmware revisions compliant per manufactures specification Call one of our AV consultants to build one today. Best Price... Always!

CD ROM & CD WRITERS

4x Pioneer CD ROM	$199
160 MS seek 256 K CacheTray Design	
4 x 6 Disk PioneerCD ROM Changer	$455
4x Toshiba CD ROM	$235
150 MS seek	
6x Toshiba CD ROM	$435
102 MS seek256 K Cache	
2x Yamaha CDE 1020	$1175
2x CD Writer• 4x CD ROM	
4 x Yamaha CDR 100	$2675
4 x CD writer•Multisession•Selectable Speed	

Prices are external and include all cables and software for a PLUG & PLAY Solution.

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Retrospect 3.0 and 1 tape included with all ProDirect tape drives.

HEWLETT PACKARD

Capacity	*Model*	*Media*	*Int.*	*Ext.*
2.0 GB	35470	4mm	$925	$985
3-5 GB	35480	4mm	995	1055
4-10 GB	1533A	4mm	1235	1295
24-60 GB	1553A		3195	3295
	Auto Tape Loader			

CONNER

Capacity	*Model*	*Media*	*Int.*	*Ext.*
2-4 GB	CTD4004	4mm	739	779
4- 8GB	CTD8000	4mm	939	989
20-50 GB	4586		2095	2195
	Auto Tape Loader			

Exabyte

Capacity	*Model*	*Media*	*Int.*	*Ext.*
2-5 GB	8205XL	8mm	$1395	$1485
7-14 GB	8505XL	8mm	2055	2115

All prices are subject to change without notice. Returned products are subject to a restocking fee. International customers pay all shipping charges. All shipping charges are non-refundable. To return merchandise call for an RMA number. All RMAs must be returned within 10 business days of issuance. Customers are responsible for all returned product shipping charges.

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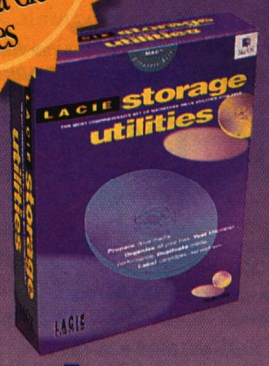

LACIE storage utilities

STORAGE UTILITIES

Includes acclaimed Silverlining disk management software plus four other vital performance enhancements!

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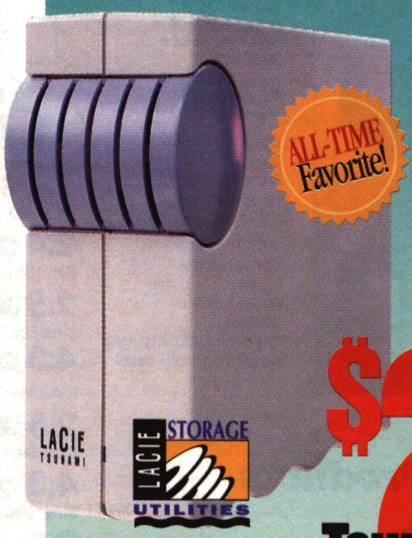
MAC HOME JOURNAL

MACUSER EDITORS' CHOICE AWARD 1995 FINALIST

MACWORLD MW EDITORS' CHOICE

TSUNAMI HARD DRIVES



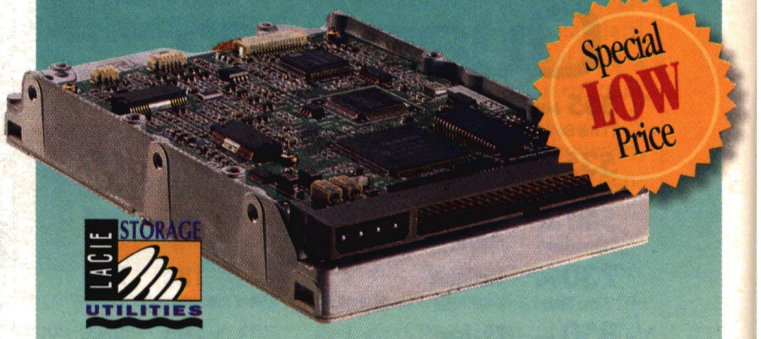
ALL-TIME Favorite!

- Complete with switchable active termination, cables and La Cie Storage Utilties.
- High-speed drive and disk-controller technology.
- Up to 4.3GB capacity in a 6.5"x8.5"x2.2" compact case.

$269 Tsunami 850 MB

850MB Quantum Trailblazer	5400 rpm	3 yr. warr.	$269
1080MB IBM Pegasus NEW!	5400 rpm	3 yr. warr.	$319
2160MB Ultrastar ES	5400 rpm	3 yr. warr.	$669
4.3GB Quantum Atlas	7200 rpm	5 yr. warr.	$1199

INTERNAL HARD DRIVES



Special LOW Price

- High-performance drive and controller technology.
- Built-in SCSI interface.

$599 IBM 2 GB

3.5" Hard Drives

850MB Quantum Trailblazer	5400 rpm	3 yr. warr.	$199
1080MB IBM Pegasus NEW!	5400 rpm	3 yr. warr.	$259
2160MB Ultrastar ES	5400 rpm	3 yr. warr.	$599
4.3GB Quantum Atlas	7200 rpm	5 yr. warr.	$1149

Brackets available for $10 with internal hard drive purchase.

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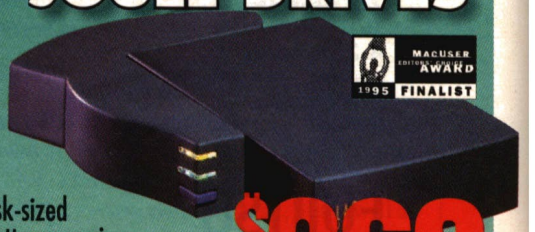
PORTABLE JOULE DRIVES



- Share hard disk-sized files with diskette convenience.
- Docking provides new security and backup solutions.

$369 Joule 1 GB

3.5" Hard Drives

850MB Quantum Trailblazer	3 year warranty	$329
1080MB Quantum Fireball	3 year warranty	$369
2210MB Quantum Capella	5 year warranty	$799

Joule Bases – Supports Stacks Up To 6 Drives High

850MB Quantum Hard Drive	3 year warranty	$389
1080MB Quantum Hard Drive	3 year warranty	$429
230MB Optical	1 year warranty	$529
270MB SyQuest	1 year warranty NEW!	$479

Joule RAID

Quantum drives bundled with Trillium Research Software configurable to levels 0, 1, 4 & 5.		RAID Drives only	RAID with SCSI CARD
4.2GB	3 year warranty	$1999	$2299
8.4GB	3 year warranty	$3499	$3799
16.8GB	3 year warranty	$6999	$7299
25.8GB	3 year warranty	$9999	$10299

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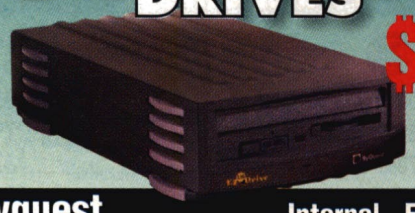
SYQUEST DRIVES

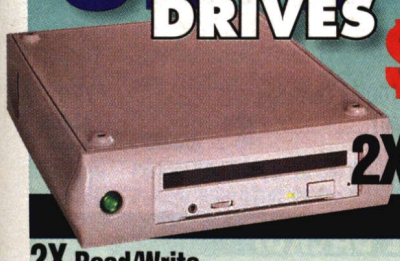


$229 EZ135

Syquest		Internal	External	Cartridge
EZ135MB	Includes FREE cartridge 2 year warranty		$229	$19.95
200MB	1 year warranty	$319	$369	$79
270MB	1 year warranty	$329	$399	$59

CD-R DRIVES

- CD-Rs ship with Gear Multimedia software.
- Low cost media for backup.
- Create your own CD with fast write capability.



$1099 2X Read/Write

2X Read/Write		$1099
2X Read/Write Yamaha	NEW!	$1199
4X Read/Write Yamaha	NEW!	$2399

OPTICAL AND DAT DRIVES

LaCie Storage Utilities

- Optical is the new standard in removable reliability.
- DAT – The ideal medium for data backup.

$1999 2.6GB Optical

Other Optical		
230MB PowerBook Internal	1 year warranty	$399
230MB Internal	1 year warranty	$399
230MB External	1 year warranty	$469
230MB Optical Cartridge		$19.95
2.6GB External	1 year warranty	$1999
2.6GB Optical Cartridge		CALL

DAT Drives Includes Retrospect	Internal	External
8.0GB Internal DAT DDS-2	$799	$899
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Silverscanner DTP Complete
Desktop color, 400x800dpi interpolated to 3200 dpi.
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Silverscanner III Package 1
Pro color, 600x1200dpi interpolated up to 4800 dpi.
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- Read-It Pro OCR
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Silverscanner III Package 2
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- Read-It Pro OCR
- Silverscan

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Scan names, addresses, phone numbers and logos for quick access, then export to your favorite contact management software.

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$259

Quantum

TRAILBLAZER 850MB

Internal Fireball C109 1202

FIREBALL 1GB

12ms Access Time

14ms Access Time

Internal TrailBlazer C109 1206

$199

BEST BUY

$1139

Quantum ATLAS 4.3GB

7200 RPM

1024K CACHE

Internal Atlas C109 1122

BEST BUY

$359*

ClubMac 200MB Removable

FEATURING SyQuest REMOVABLE TECHNOLOGY

200MB

C109 1222

*Cartridge sold separately.

$234.95

S198 2001

EZ135 Drive

FEATURING SyQuest REMOVABLE TECHNOLOGY

135MB

Features:
135MB Capacity
SCSI Interface
13.5ms access
TWO Year Warranty

$199

C109 9546

ClubMac 4X

Features:
600KB/sec data transfer
190ms ave access time
Caddy-less design

$339

N024 1070

NEC

MultiSpin 4Xc
7 Disc Changer
Load 7 Discs at a time!

Source Code 65076

ClubMac

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CLUBMAC HARD DRIVES

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		Internal/External	Internal/External
850MB TrailBlazer		C109 1206/C109 1207	$199/$259
1080MB Fireball		C109 1202/C109 1203	$259/$319
2200MB Capella		C109 1213/C109 1212	$669/$729
2150MB Atlas		C109 1112/C109 1111	$799/$859
4300MB Atlas	BEST BUY	C109 1122/C109 1121	$1139/$1199

Seagate

2.4GB Hawk 2 LP 32430N		C109 2211/C109 2112	$689/$749
4.3GB Hawk 4 15230N		C109 2212/C109 2113	$999/$1059
2.5GB Barracuda 2 LP 32550N		C109 2203/C109 2109	$769/$829
4.3GB Barracuda 4 15150N		C109 2207/C109 2106	$1259/$1319
5.25" Full Height			
9.1GB Elite-9 410800N		C109 2231/C109 2110	$2199/$2299

CLUBMAC 2.5" DRIVES

Quantum

	Internal/External	Internal/External
514MB Daytona	C109 1021/C109 1109	$219/$339
810MB Europa IDE*	C109 1022	$429 Internal
1080MB Europa IDE*	C109 1023	$475 Internal

*Compatible with PowerBook 150 and 5300 series only.

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Seagate

	Internal/External	Internal/External
2.1GB Barracuda 2LP ST32150W	C109 2214/C109 2215	$849/$949
4.3GB Barracuda 4 ST15150W	C109 2206/C109 2208	$1329/$1429
9.1GB Elite 9 ST410800W	C109 2220/C109 2222	$2269/$2389

Quantum

2.2GB Capella VP32210SW	C109 2219/C109 2217	$699/$799
4.3GB Grand Prix XP34301SW	C109 2216/C109 2218	$1029/$1129

Fast and Wide Controllers

adaptec

A024 1006	PowerDomain AHA 2940W SCSI Accelerator	$299
A029 1001	Adaptec Remus 1.3 (Raid Levels 1, 4, 5) (Software)	$439

FWB incorporated

F094 1033	SCSI JackHammer PCI	$389
F094 1002	SCSI JackHammer NuBus	$459

QLogic

Q010 1008	Fast!SCSI MAC PCI-N for Fast SCSI-2 (10 MB/sec) connectivity	$229
Q010 1009	Fast!SCSI MAC PCI-W for Fast/Wide SCSI (20 MB/sec) connectivity	$295
Q010 1010	Fast!SCSI MAC PCI-D for Fast/Wide SCSI where longer I/O cables required	$449

CD-ROM READERS

NEC

		Access time	Trans Rate
N024 1062	MultiSpin 6Xe CD-ROM Reader	150ms	900k/sec. $479
N024 1070	MultiSpin 4Xc 7 Disc Changer	350ms	600k/sec. $339
N024 1011	MultiSpin 3Xp plus CD-ROM Reader	240ms	500k/sec. $379

ClubMac

		Access time	Trans Rate
C109 9555	ClubMac Six-Speed CD-ROM Drive	145ms	900k/sec. $369
C109 9546	ClubMac Quad-Speed CD-ROM Drive	140ms	600k/sec. $199
C109 9570	ClubMac Classic 2X CD-ROM Drive	250ms	300k/sec $99
C109 9550	ClubMac Dual-Speed CD-ROM Drive	350ms	300k/sec. $88.88

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REMOVABLE DRIVES

ClubMac

C109 1222	ClubMac 200MB 5.25" Removable*	$359
C109 1221	ClubMac 88MB 5.25" Removable* BEST BUY	$199
C109 1224	ClubMac 270MB 3.5" Removable*	$375
C109 1223	ClubMac 105MB 3.5" Removable*	$149
S198 2001	SyQuest EZ135 135MB 3.5" Removable	$234.95

*Cartridge not included

SyQuest Media

BEST BUY

Part Number	Media	Qty 1	Qty 10	Qty 20
S198 1010	44MB	$42ea	$41ea	$40ea
S198 1011	88MB	$47ea	$46ea	$45ea
S198 1012	200MB	$75ea	$73ea	$71ea
S198 1013	105MB	$35ea	$34.50ea	$34ea
S198 1014	270MB	$60ea	$59ea	$58ea
S198 2010	EZ135MB	$23ea	$22.50ea	$22ea

iomega

I044 1010	Zip Drive with One 100MB Cartridge	$199.99
I040 1006	Zip Cartridge (100MB)	$19.99
I040 1011	Zip Cartridge (3 pack)	$49.95
I040 1010	Zip Cartridge (10 pack)	$149.95

TAPE BACKUP

ClubMac

Shipped with Retrospect 3.0

C109 2042	ClubMac 2-4GB SCSI MiniCartridge Drive (Cartridge not included)	$499
C109 5039	ClubMac 2.0GB ThunderDAT Drive	$749
C109 5000	ClubMac 4-8GB DDS-2 DAT Drive	$899
C109 4301	ClubMac 4-8GB DDS-2 SuperDAT Drive	$1199
C109 1236	ClubMac 40GB DLT Subsystem DLT 4000	$5799
S100 1043	Sony QW3080XLF QIC/WIDE 2-4GB Cartridge	$29
V010 1018	Verbatim 90M 4mm DAT Cartridge 2-4GB	$11
V010 1043	Verbatim 120M 4mm DAT Cartridge 4-8GB	$24
Q034 1022	1/2 inch media for DLT 4000	$99

OPTICAL DRIVES

ClubMac

C109 5022	ClubMac 5.25" Olympus 1.3GB Optical w/1.3GB Cartridge	$1399
C109 5020	ClubMac 3.5" Olympus 230MB Optical w/230MB Cartridge	$459
V010 1021	Verbatim 1.3GB Optical Cartridge 1024KB	$59
V010 1013	Verbatim 230MB Formatted Optical Cartridge	$29

TORAY Optical Storage Solutions

T140 1001	TORAY Phasewriter DUAL™ PD 4XCD/650MB Optical	$649
T140 2001	TORAY PDM-650 Media (ZCAV 650MB)	$59

Pinnacle Micro

P074 1005	Apex 4.6GB Optical w/One Cartridge	$1589
P074 1006	Apex 4.6GB 1024K Media	$189

CD RECORDABLE DRIVES

Microboards of America

M274 1002	PlayWrite 2X 2000 CDR w/Gear Multimedia	$1289
M274 1004	PlayWrite 4X 4000 CDR w/Gear Multimedia	$2689

YAMAHA®

Y010 1002	Yamaha 4X CD Recorder w/Toast CD Mastering software	$2799

Pinnacle Micro

P074 1001	RCD-1000 2X Recordable CD System w/ Toast software	$1429
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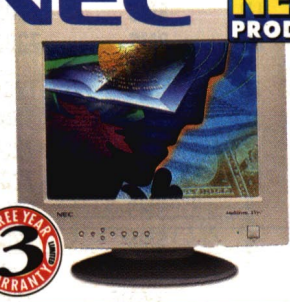

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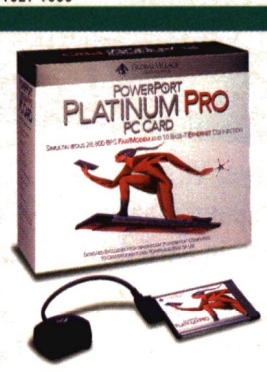

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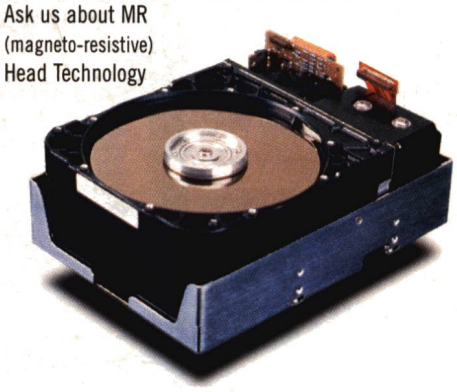

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Fujitsu m1606s	1.2GIG	LP	10MS	5400	$ 299	$ 369
Seagate ST31230N	1.2GIG	LP	9MS	5400	$ 409	$ 475
Seagate Hawk	2.4GIG	LP	9MS	5400	$ 655	$ 725
Conner CFP2105S	2.1GIG	LP	9MS	5400	$ 585	$ 655
Fujitsu M2915S	2.1GIG	MR	8.9S	7200	$ 699	$ 799
Conner CFP2107S	2.1GIG	LP	8MS	7200	$ 759	$ 829
Quantum Capella	2.2GIG	LP	8.6MS	5400	$ 699	$ 799
Seagate Barracuda 2	2.5GIG	LP	8MS	7200	$ 815	$ 885
Seagate Barracuda 2W	2.5GIG	LP	8MS	7200	$ 939	$ 999
Conner CFP2107W	2.5GIG	LP	8MS	7200	$ 795	$ 895
Fujitsu m2934s	4.2GIG	MR	8MS	7200	$ 1125	$ 1195
Fujitsu m2934W	4.2GIG	MR	8MS	7200	$ 1175	$ 1275
Seagate Barracuda 4	4.1GIG		8MS	7200	$ 1295	$ 1365
Seagate Barracuda 4W	4.1GIG		8MS	7200	$ 1365	$ 1435
Seagate ST15230N	4.3GIG		9MS	5400	$ 999	$ 1099
Conner CFP4207S	4.2GIG		9MS	7200	$ 1045	$ 1115
Conner CFP4207wide	4.2GIG		9MS	7200	$ 1099	$ 1199
Atlas XP34300s	4.3GIG		8.6MS	7200	$ 1099	$ 1169
Seagate Elite 9	9.0GIG		11MS	5400	$ 2095	$ 2195
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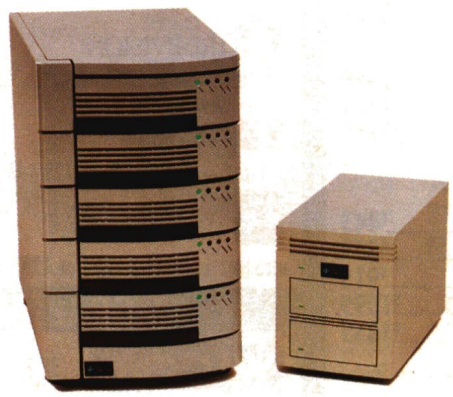

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1.3GB	Sony 4MB cache	$ 1695
2.6GB	Sony	$ 1959
26GB	Sony Jukebox	$ 4695

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-14GIG	Exabyte 8505XL	8MM	$ 2065	$ 2125
-10GIG	Exabyte 8505S	8MM	$ 1475	$ 1575
-30GIG	DLT2000XT	1/2"		$ 3595
-40GIG	DLT4000	1/2"		$ 5499
-140GIG	Exabyte-10h Library	8MM		$ 4999
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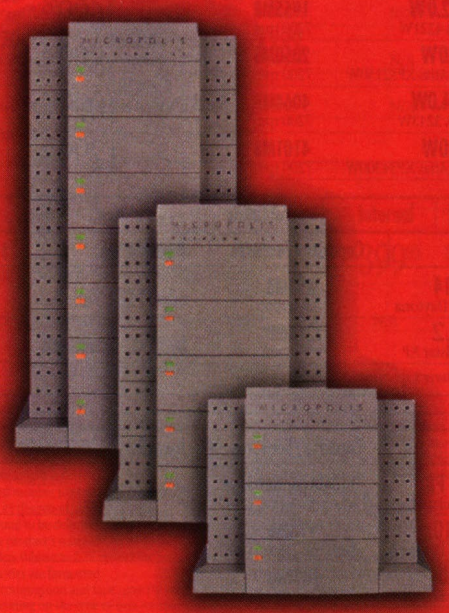

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850 MB	DT-850TB	Quantum	11 ms	2 yrs	$199	$275
1.0 GB	DT-1080FB	Quantum	11ms	3 yrs	$275	$350
1.05 GB	DT-31230	Seagate NEW LOW PRICE!	9.0 ms	5 yrs	$380	$455
2.0 GB	DT-4221	Micropolis NEW LOW PRICE!	8.0 ms	5 yrs	$685	$760
2.0 GB	DT-32150	Quantum -Atlas	8.5 ms	5 yrs	$895	$970
2.0 GB	DT-2490	Hewlett Packard	9.0 ms	5 yrs	$1,100	$1,185
2.1 GB	DT-32550	Seagate Barracuda II NEW LOW PRICE!	8.0 ms	5 yrs	$775	$850
4.3 GB	DT-3243	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$1,025	$1,099
4.3 GB	DT-15150	Seagate Barracuda NEW LOW PRICE!	8.0 ms	5 yrs	$1,199	$1,275
4.3 GB	DT-4280	Quantum	8.0 ms	5 yrs	$1,025	$1,100
9.0 GB	DT-1991	Micropolis NEW LOW PRICE!	12 ms	5 yrs	$1,950	$2,050
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2.0 GB	DT-4221AV	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$735	$810
2.1 GB	DT-32550AV	Seagate Barracuda	8.0 ms	5 yrs	$775	$850
4.3 GB	DT-3243AV	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$1,075	$1,150
4.3 GB	DT-15150AV	Seagate Barracuda	8.0 ms	5 yrs	$1,199	$1,275
9.0 GB	DT-1991AV	Micropolis NEW LOW PRICE!	12 ms	5 yrs	$2,050	$2,150
9.0 GB	DT-410800AV	Seagate Elite 9 NEW LOW PRICE!	11 ms	5 yrs	$2,025	$2,125

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2.1 GB	DT-4221W	Micropolis 4221Wide	5 yrs	$775	$850
4.3 GB	DT-15150W	Seagate Barracuda 4 Wide	5 yrs	$1,250	$1,325
4.3 GB	DT-3243W	Micropolis 3243Wide	5 yrs	$1,100	$1,275
9.0 GB	DT-1991W	Micropolis 1991Wide	5 yrs	$2,185	$CALL
9.0 GB	DT-1991AVW	Micropolis 1991AVWide	5 yrs	$2,285	$CALL
9.0 GB	DT-410800W	Seagate Elite 9 Wide	5 yrs	$CALL	$CALL

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Capacity	*Model No.*	*Mechanism*	*Seek*	*Warranty*	*EXTERNAL*
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8.0 GB	DT-3243WAV	Micropolis - Fast/Wide 3243AV (2)	4.0 ms	5 yrs	$CALL
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ATTO Express PCI		Dual Channel - PCI -Fast/Wide			$CALL
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200 MB	SQ5200	$420	$480
270 MB	SQ3270	$420	$470

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4-8 GB	Sony-5000	DDS-2	$999
4-8 GB	HP-1533A	DDS-2	$1,299
5-10 GB	Exabyte-8505	8mm	$2,150
15-30 GB	DLT-2000XT	DLT	$4,399

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Capacity	*Model No.*	*Seek*	*PHASER-I*
230 mb	Fujitsu	30 ms	$675
1.3 GB	HP-C1716	23 ms	$2,099
1.3 GB	Maxoptix T-III	18 ms	$2,199

MEDIA

Type	*Price*
Syquest 44	$40
Syquest 88	$46
Syquest 105	$54
Syquest 200	$76
Syquest 270	$60
Optical 128 MB	$22
Optical 230 MB	$30
Optical 1.0 GB	$100
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An exceptional value, the APS I 1080 is an ideal choice as your next general purpose hard drive. Its 1034MB formatted capacity, sustained reads of 3.32MB per second and sustained writes of 3.67MB per second are a natural fit with almost any application from business and productivity to page layout and design. The 5400 rpm APS I 1080 has low power requirements compared to other 5400 rpm-1GB drives. A three-year warranty backs the APS I 1080, and it is rated at 350,000 hours MTBF.

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APS ST 4200

$899.95 *Internal configuration*

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Upgrading your system to store even more files has never been easier on your wallet. The new APS ST 4200 is our lowest priced 4GB drive ever, and delivers terrific performance. It employs a 5400 rpm Seagate Hawk mechanism and a 512K cache buffer to give sustained data transfer rates of up to 3.7MB per second. This reliable drive is backed by a five-year warranty and boasts an 800,000 hour MTBF. For value and reliability the APS ST 4200 is the best.

APS SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS Q 840 Quantum 840 Trailblazer	811MB 4500 rpm	MacUser ZD LABS ★★★★	$199.95	$299.95
APS I 1080 IBM DPES 31080	1034MB 5400 rpm		239.95	339.95
APS Q 1080 Quantum 1080 Fireball	1042MB 5400 rpm	◆◆◆◆ MacWEEK; MacUser ZD LABS ★★★★	269.95	349.95
APS Q 1280 Quantum Fireball II 1280	1222MB 5400 rpm		299.95 NEW FROM APS	399.95
APS I 2160 IBM Ultrastar ES	2063MB 5400 rpm		499.95 NEW	599.95
APS Q 2210 Quantum Capella VP32210	2103MB 5400 rpm	MacUser ZD LABS ★★★½	629.95	699.95
APS ST 4200 Seagate ST 15230N Hawk	4094MB 5400 rpm	MacUser ZD LABS ★★★★	899.95 NEW LOWER PRICE	999.95

APS HIGH-PERFORMANCE SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS MS 2.0 Micropolis 4221	1955MB 7200 rpm	MacUser ZD LABS ★★★½	$599.95 NEW LOWER PRICE	$699.95
APS Q 2.0 Quantum Atlas XP32150	2050MB 7200 rpm	MacUser ZD LABS ★★★★	799.95	899.95
APS ST 2.0 Seagate ST 32550N Barracuda	2047MB 7200 rpm		799.95	899.95
APS MS 4.0 Micropolis 3243	4064MB 7200 rpm	MacUser ZD LABS ★★★★	999.95 NEW LOWER PRICE	1099.95
APS Q 4.0 Quantum Atlas XP34300	4101MB 7200 rpm	◆◆◆◆ MacWEEK; MacUser ZD LABS ★★★★½	1199.95	1299.95
APS ST 4.0 Seagate ST 15150N	4094MB 7200 rpm	MacUser ZD LABS ★★★½	1199.95 NEW LOWER PRICE	1299.95
APS MS 9.0 Micropolis 1991	8669MB 5400 rpm		1999.95 NEW LOWER PRICE	2199.95
APS ST 9.0 Seagate ST410800N	8669MB 5400 rpm		2199.95	2399.95

APS FAST/WIDE SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS MS 2.0W Micropolis 4221W	1955MB 7200 rpm		$699.95 NEW LOWER PRICE	$799.95
APS Q 2.0W Quantum Atlas XP32150W	2050MB 7200 rpm		899.95	999.95
APS MS 4.0W Micropolis 3243W	4064MB 7200 rpm		1099.95 NEW LOWER PRICE	1199.95
APS Q 4.0W Quantum Atlas XP34300W	4101MB 7200 rpm		1299.95	1399.95

APS SCSI POWERBOOK DRIVES

Model	Capacity/Features	Awards	Internal
APS Q 514 Quantum Daytona	491MB 4500 rpm		$199.95
APS I 1.2 IBM Travelstar XP	1215MB* 4900 rpm		699.95

**Manufacturer's specifications.*

APS AUDIO/VIDEO SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS MS 2.0AV Micropolis 4221AV	1955MB 7200 rpm		$699.95 NEW LOWER PRICE	$799.95
APS MS4.0AV Micropolis 3243AV	4064MB 7200 rpm		1099.95 NEW LOWER PRICE	1199.95
APS MS9.0AV Micropolis 1991AV	8669MB 5400 rpm	MacUser ZD LABS ★★★★	2099.95 NEW LOWER PRICE	2299.95

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Model	Capacity/Features	Awards	Internal
APS 170 PB Avatar mechanism	170MB per cartridge Each cartridge only $49.95		$399.95
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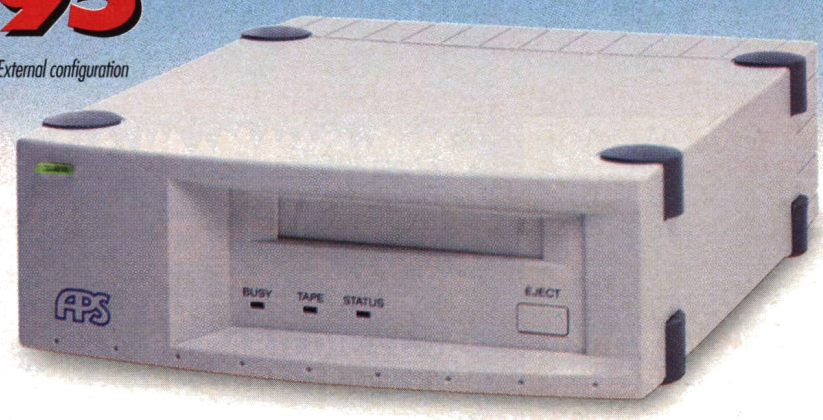

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APS SQ 3270 Our best performing removable cartridge drive	255MB	MacUser ZD LABS ★★★★½	N/A	349.95*
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Model	Capacity/Features	Awards	Internal	SR2000
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APS ProDAT DDS-2 Non-Compression Mechanism	4GB		749.95	799.95
APS HyperDAT DDS-2 Compression Mechanism	8GB		849.95	899.95
APS DATLoader600 Ideal for unattended large network backups	48GB		N/A	2499.95

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Model	Capacity/Features	Awards	SR2000
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APS DLT40 Digital Linear Tape Mechanism	40GB		N/A NEW LOWER PRICE	5499.95
APS DLT4500 Loader Digital Linear Tape Mechanism	200GB		N/A	9999.95
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PowerMac Memory Selection Guide

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(8MB) Standard 72-pin SIMMS

To upgrade your RAM to:	You need to order:
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24MB	(2) 8MB 70/60NS
40MB	(2) 16MB 70/60NS
72MB	(2) 32MB 60NS
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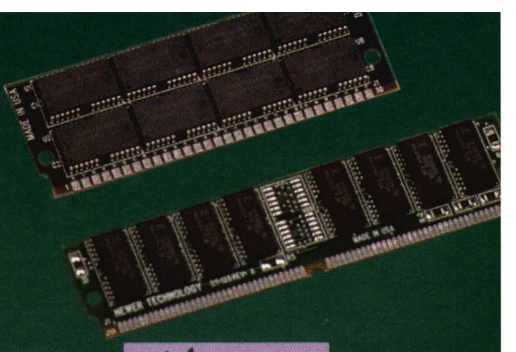

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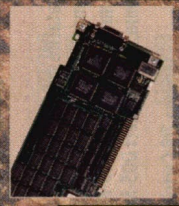

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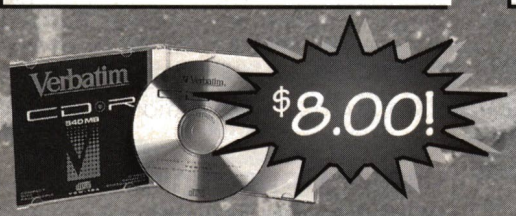

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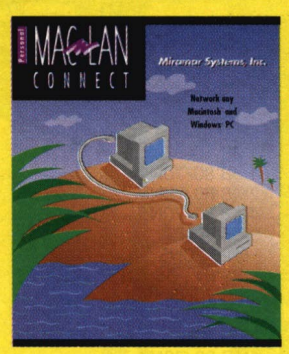

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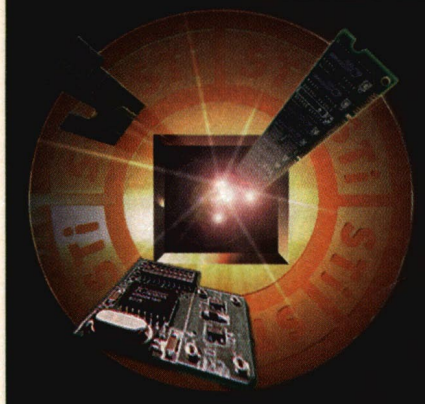

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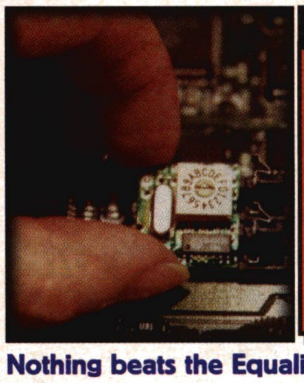

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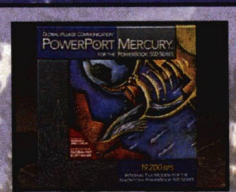

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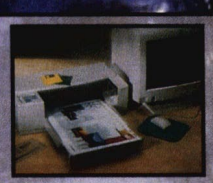

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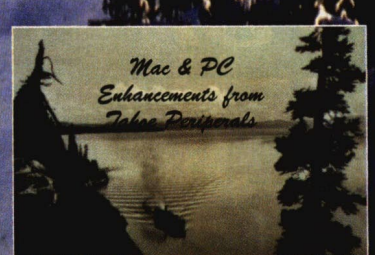

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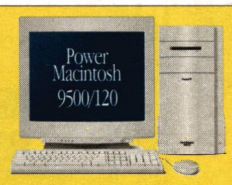
6205CD 8/1GB	1,949.
6220CD/TV 16/1GB	1,857.
6300CD 16/1.2GB	2,600.



PowerMac 9500/120
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Displays

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15" Multiple Scan	379.
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1705 Multiple Scan	705.
Apple Vision 1710AV	995.
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Storage Devices

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Quantum 1GB HD Ext	290.
Quantum 2GB HD Ext	710.
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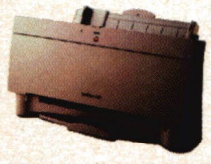

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520C	4/240	$1399*
520C	4/240/mod	$1599*
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Duo 28012/240/Mod		$2299
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6200CD	8/1GIG/CD	$1699
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9500/120 16/1GB/CD	$3199
8100/110 16/2GB/CD	$2939
7200/75 8/500/CD	$1298
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PB 5300C/100 16/750	$3289
PB 5300CS/100 8/500	$2129
PB 5300/100 8/500	$1289
PB 520 4/160 Ref	$1198
PB 520 4/240	$1399
LaserWriter 4/600 PS	$799
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Power Mac 9500[120] 16/1GB/CD	3,149
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Power Mac 7200[75] 8/500/CD	1,119
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Stylewriter 2400	369
Stylewriter 2200 Color	369
Laserwriter 4/600	749
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Apple Monitor 17"- NEW	729
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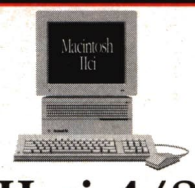

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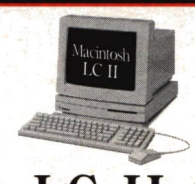

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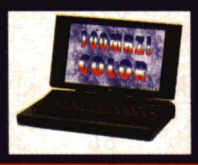

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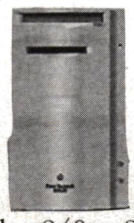

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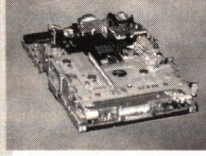

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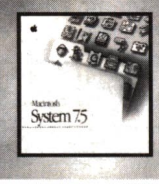

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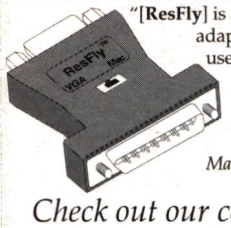

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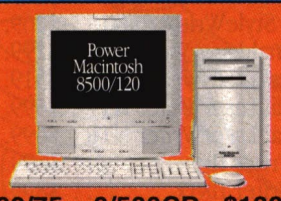

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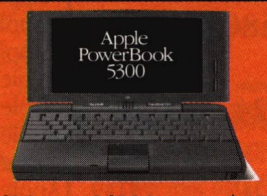

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Shinko

From Page 1

A-sized ColorStream II DP and tabloid-size ColorStream II DPL will sell for $7,995 and $14,995, respectively.

According to Shinko, the continuous-tone CMY and CMYK ColorStream II printers will feature photorealistic output with a resolution of 300 dpi; the company said it will target both the pre-press and digital-photography markets.

Shinko said the DP and DPL will support full-bleed images measuring up to 9.4 by 12.6 inches and 12.2 by 18 inches, respectively.

The ColorStream II printers will ship with a proprietary engine that resembles the Shinko mechanism included in ColorStream printers originally distributed by Mitsubishi International Corp. (see 02.01.93, Page 28). However, the engine has been revamped to improve registration and consistency, Shinko said.

Both models will feature a 33-MHz AMD 29030 RISC processor as well as an embedded Adobe PostScript Level 2 RIP. The ColorStream II DP and DPL will come equipped with 16 and 24 Mbytes of RAM, respectively; each can accommodate 128 Mbytes.

According to Shinko, the tabloid-size device will be able to output a CMYK image in six minutes, when printing in fine mode onto oversize media.

The forthcoming printers will feature an internal 543-Mbyte hard drive for downloaded fonts and image buffering. The devices will be able to process new print jobs while printing.

Both printers will have LocalTalk, parallel and serial ports. An optional Ethernet card will support multiple protocols; pricing for that has not yet been set.

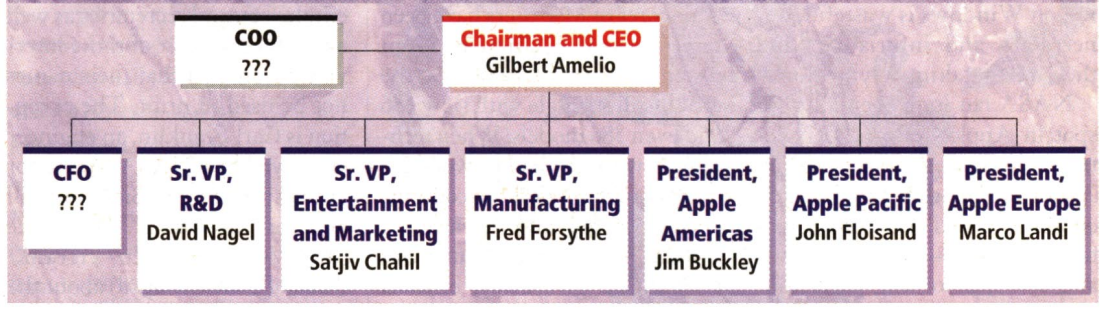
"The Shinko engines have proven their reliability through their OEM sales over the past several years," said Susan Hayes, manager of International Data Corp.'s U.S. printer research program in Framingham, Mass. "The challenge [for Shinko] will be to attain brand-name recognition against household names in a demanding but small niche market."

The ColorStream II devices will ship with FasterRaster, a proprietary Adobe Photoshop driver that lets users print images faster from within Photoshop. The printers will also come with FotoTune 2.0 color-matching software from Agfa, a division of Bayer Corp., and device profiles for ColorSync 2.0, Apple's system-level color-management technology.

Shinko will also ship its dual-mode ColorStream Digital printer this spring; the device will be able to print both thermal-wax and dye-sublimation images. Its ribbon will reportedly feature an ultraviolet coating to increase print durability and archival quality, Shinko said. Pricing has not been set.

Shinko Technologies Inc. of Hayward, Calif., can be reached at (510) 441-1175 or (800) 997-4465; fax (510) 441-2263. □

Fill in the blanks: Missing pieces in Apple's new organization



Amelio

From Page 1

pects to report a second-quarter loss that some analysts said could top $150 million.

With Apple facing its most serious crisis in years, Mac insiders offered Amelio their suggestions on how to repair Apple's tattered reputation.

"[Amelio's] primary challenge is to fix this thing and get the stock up for another possible merger," said Ted Helvey, president of Big Software Inc., a Los Altos, Calif., Mac developer. "I think he will make major changes in one fell swoop and do it decisively."

If Apple observers have their druthers, changes will include continued product innovation, more aggressive courting of clone partners, improving product forecasting, patching up developer relations and simplifying product lines.

Ford Goodman, CEO of CE Software Inc. of West Des Moines, Iowa, was blunt: "Don't kill your business partners and change the culture. You can't run a $12 billion business by committee."

Bud Colligan, CEO of San Francisco-based Macromedia Inc., said he would like Amelio to bring in outside senior managers capable of correcting problems in forecasting, sales and marketing. "It's a $12 billion company, and they need $12 billion managers."

Decisiveness is also key, observers said. "Apple ought to step up to the plate and swing hard," said Alan Lefkof, CEO of Alameda, Calif.-based Farallon Computing Inc. "Whatever decisions Apple needs to make, they should make them and then move on."

At the same time, industry observers said the departure of former Apple CEO Michael Spindler was long overdue. "When you have your company logo on the cover of BusinessWeek over a headline that says, 'The fall of an American icon,' it's time to go," said Lou Doctor, CEO of Truevision Inc. of Santa Clara, Calif. "Apple may have a good technology and strategy, but you don't want an introvert for a CEO conveying its message."

Users agreed. David Pensak, senior research fellow at DuPont Central Science and Engineering in Wilmington, Del., said: "There absolutely had to be a change at the top. Confidence was eroding and nothing existing management could have done would have fixed it. There is nothing fundamentally wrong with Apple. The doom and gloom stuff doesn't scare me off."

In fact, observers said the infrastructure at Apple is good; all it requires is strong management and a focused plan. "Despite management changes, the underlying fundamentals at Apple in terms of unit growth, revenue growth and worldwide demand remain very, very strong," said Stephen Kahng, CEO of Power Computing Corp. of Round Rock, Texas.

Bill Gates, CEO of Redmond, Wash.-based Microsoft Corp., who has said he attempted unsuccessfully to meet with Spindler for more than a year, said Apple can still recover from its losses and declining market share.

Gates, speaking to a gathering of business and political leaders in Davos, Switzerland, last week, said, "A near-death experience often revitalizes a company," according to Reuter reports. He said Apple's best opportunity would come from reviving its original track record as an innovator.

Meanwhile, Spindler and company Vice Chairman A.C. Mike Markkula churned out more internal memos on Apple's tumultuous month. Markkula, the former Apple board chairman, admitted in a Feb. 4 message to employees that Apple made a major miscalculation in its "expectations about margins ... so we have to change our business model again.

"The press has created the perception that Apple is in a 'going out of business' mode. Bull—-! With Gil's help and leadership, we can get going on that issue immediately," Markkula wrote.

In his Feb. 2 farewell memo to employees, Spindler said it was the Apple board's decision to "make a change in management moving the company forward — that's the fact. So it's time for me to go! Mistakes or misjudgments made? Oh yes — even plenty.

"I take personal responsibility for things that didn't work and should have worked," he wrote. □

PowerBooks

From Page 1

will cost about $2,000, while a high-end machine with a 256-Kbyte Level 2 cache and 166-MHz 603e could cost less than $3,000. The low-end configuration is due this summer; the higher-end model is expected to ship this fall. Sources said the 5300 line will be discontinued when Epic is released.

Further off is Hooper, which will be the first PowerBook to include the PCI bus. The new laptop will reportedly use either a PowerPC 603e or 603ev with speeds between 166 and 200 MHz. Hooper was originally scheduled for an October release, but sources said the laptop will likely arrive closer to January 1997.

Hooper will employ a PCI bus technology code-named PowerStar, which reportedly requires a revised form factor for PCI cards. Users will be able to plug PCI cards into a connector on the side of the machine, similar to the processor direct slot used by Duo docks. However, Hooper's PCI connector won't be compatible with current Duo dock products. Another PCI slot will be accessible by flipping up the removable keyboard.

PowerBooks in the wings — and shot down

CODE NAME	PROCESSOR	NOTABLE FEATURE	PROJECTED SHIP DATE
Epic	133- and 166-MHz 603e	CD-ROM drive, L2 cache	July
Hooper	166- to 200-MHz 603e or 603ev	PCI card slots	October '96-January '97
Mustang	133-MHz 603e	L2 cache	Killed

Sources were optimistic about the Epic and Hooper projects. "Apple has finally hit the nail on the head with Epic," said a source familiar with the project. Another source noted that PCI might allow PowerBooks to serve as both desktop and mobile computers, an original goal of the Duo line.

The PowerBook 5300 series has been plagued with hardware and software bugs, and the portables have not been selling as well as Apple had projected. Sources said the Mustang project was killed partly because the company feared that, like the much-maligned 5300 machines, it would not sell well.

However, sources close to Apple said that, thus far, Epic's performance in reliability tests is proving to be very good. In fact, one source commented that while the 5300 series' pre-production failure rate was the worst of any recent Apple CPU, early Epic test units are logging some of the best reliability scores in the company's history.

Apple declined to comment. □

Andrew Gore contributed to this report.

Quicken banking on-line

Intuit Inc. last month released an update to Quicken 6.0 that enables on-line banking features.

Users can now download and synchronize their checking, savings and charge-card transactions through the program as well as transfer funds between accounts at the same bank. The service can also check balances and reconcile accounts automatically. Customers must sign up for the service through their bank.

The update, available via on-line services, on the Internet and directly from Intuit, also fixes several minor bugs.

Intuit Inc. of Menlo Park, Calif., is at (520) 295-3110 or (800) 816-8025; fax (520) 295-3014. □

NASA

From Page 1

ing on Windows is wasteful, unnecessary and infuriating, and they are not taking it lying down.

NASA has long been a bright spot in Apple's efforts to penetrate the government market. About one-quarter of the desktop computers used at the space center are Macs — between 2,800 and 3,600, according to various estimates.

But the space center, at the urging of Chief Information Officer John R. Garman, decided last spring to make Windows its standard office-automation platform. In an interview with MacWEEK, Garman said he has pursued the policy "in as fair and balanced a manner as possible," pushing an "evolutionary movement toward a uniform standard" while seeking to get full value out of existing equipment.

The space center's Mac champions paint a different picture: They say Mac users face the "third degree" when they request even inexpensive software updates; mid-level managers are strong-armed into endorsing Garman's policies; and scores of Mac users have been forced to switch to new Pentium systems, even as other users at the center still struggle with slow 486 and even 386 models. When technicians who had had to work for months without desktop computers discovered and retrieved a cache of Macs the space center was planning to give away, officials promptly prohibited such redistributions of "excess" equipment.

Garman is an articulate champion of standardization, citing that the costs of duplication of services as well as interoperability hassles threaten the center's ability to carry out its mission in the face of drastic budget cuts.

Garman is also an unabashed Windows enthusiast. In fact, he was singled out in the first paragraph of an open letter Microsoft Corp. placed as an ad in InfoWorld last summer to thank customers and partners for their contributions to Windows 95. (The only other individual mentioned by name was a 9-year-old.)

The space center's Mac loyalists include both staff and contract employees, and secretaries as well as engineers. Most of those interviewed insisted that their names not be used in print. The exception is Carl Franklin, an engineer employed by a NASA contractor at the space center. Since last fall he has hosted a Web site (http://www.icsi.net/~crfrank/TableofContents.html) about the controversy.

Franklin has focused on life-cycle cost, which is said to be a primary factor in government technology-procurement decisions. When he requested the life-cycle cost data behind the decision to standardize on Windows, he said he faced a bureaucratic runaround. He ended up complaining to the office of the space center ombudsman — who turned out to be Garman's wife.

Garman conceded that both internal and published studies have rated Macs far less expensive to support. But he dismissed most of them as irrelevant because they were not based on Windows 95; a recent Gartner Group Inc. report that does include Windows 95 puts the Mac advantage at only a few hundred dollars, which he said "approaches the point of diminishing returns."

The latest furor at the Johnson Space Center involves a shipment of 600 Pentium systems that arrived in December. They were ordered for the International Space Station program, a predominately Mac-based group located at the space center but under the authority of NASA headquarters; officials had reportedly acceded to the choice of Pentiums (after comparative benchmarking with Microsoft Office) because Boeing Co., prime contractor on the project, requested them.

But when Boeing decided it no longer cared which platform would be acquired, Space Station officials refused to take delivery of half the Pentiums. The space center's Information Services Directorate frantically pressed other groups to adopt the homeless Pentiums — even where users were happily and productively using Macs.

If forced replacement of up-to-date Macs has occurred, Garman said, it has been at line management's direction, not his own. But he acknowledged that some users might have to accept policies they resent. "Where we used to judge [information technology] support and value based on pleasing users first, their organization second and the center third, we've now inverted that list," he said. "The value of a person to an organization is in what they produce as a team as well as an individual."

While the debate rages, the Mac continues with the right stuff for some. McDonnell-Douglas' Space Station Division in Houston recently purchased 241 Power Macs and 67 Pentiums. "From out of the box to up and running on the network took only 40 minutes, on average, for the Macs," said Kurt Klaus, desktop support manager. Weeks later, technicians were still struggling to get the Pentiums configured and connected. □

Storage

From Page 1

operations positions. SyQuest said it will seek candidates for a new CEO and president; founder Sayed Iftikar currently holds these titles as well as being chairman.

Although SyQuest's $78.7 million quarterly revenues were up 19 percent from last year, its gross product margins shrank to -11.8 percent from 24 percent last year, mostly because of the high production cost of the EZ135 drive.

"We wondered how SyQuest could make money on [the EZ] and lo and behold, we were right," said Jim Porter, president of Disk/Trend Inc. of Mountain View, Calif. Industry insiders said SyQuest is losing about $40 on each drive.

"The EZ135 was brought to market in a rush," said Jim Graber, acting CFO of SyQuest. Graber said the company is committed to the low-end market and will deliver a higher-capacity EZ drive by the third quarter.

Graber said the new drive will be less expensive to build and will be compatible with the current 135-Mbyte media. Sources said the new 3.5-inch drive will use cartridges with a capacity of about 210 Mbytes.

Iomega Zip drives are also eroding SyQuest's place as the removable media of choice for prepress, analysts said. "Drop in on a pre-press shop and you'll see a stack of Zip disks alongside the 5.25-inch [SyQuest cartridges] — 100 Mbytes is OK for a hell of a lot," Porter said.

SyQuest said it saw 49 percent lower sales of its high-margin 200-Mbyte and 270-Mbyte drives in the past quarter; it took an $8.6 million provision toward excess inventories of these drives.

SyQuest is reportedly looking to Japan for partners to help it ship new products, including the 1.3-Gbyte SyJet drive. Analysts said the potential partners are taking a wait-and-see attitude.

Not immune from trouble, Iomega this month pulled the plug on a second public offering that it hoped would raise about $50 million, stock analysts said.

Iomega, based in Roy, Utah, denied published reports that it had changed its method of accounting for bad debt and inventory. In a letter to stockholders, President Kim Edwards said the company will need additional financing to fund plans in the second half of the year. Analyst opinion was divided on whether the money was needed to expand Zip and Jaz production, or for unannounced products.

The company said it is still experiencing Zip component shortages and has not met demand.

"The initial predictions for Zip were conservative," said Stan Corker, an analyst at International Data Corp. of Framingham, Mass. "Even when the Zip became a success, the component vendors were slow to believe it."

Analysts said while the parts situation may improve this year, it is unclear if Iomega will straighten out its feast-or-famine relationship with the channel.

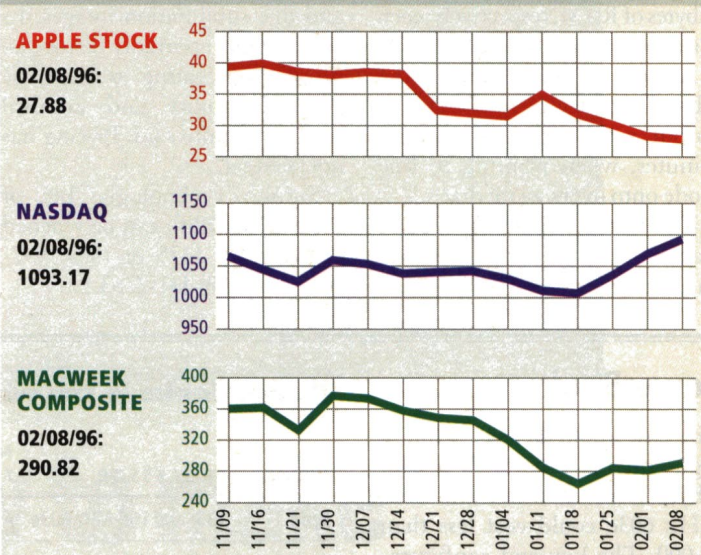
"For a month a store won't have any Zip drives in stock; then suddenly they receive 200 units," said analyst John Freeman with Strategic Marketing Decisions of Los Gatos, Calif. "Both Iomega and SyQuest have done a fantastic job of marketing, but their execution is awful."

Third-party vendors also expressed disappointment with delays in shipments of Iomega's Jaz drive, which uses 1-Gbyte removable hard drives. Jaz is now shipping in arrays and in internal configurations from MicroNet Technology Inc. and ProMax Technology Inc. MicroNet also has released external Jaz drives.

Tim Hill, Iomega vice president of worldwide marketing, said the company is seeding the new drive initially in products for use in digital video applications. According to sources, Iomega only recently finalized its firmware design and encountered more trouble than expected in developing its SCSI Manager 4.3-compatible driver; the third-party Jaz drives use proprietary software.

Some users reported problems with the Jaz, including sensitivity to radio-frequency noise and a shortage of Mac-formatted media. However, vendors said they were not experiencing significant problems with the drive and expected Iomega to iron out the problems as it increases production. □

StockWatch



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Apple	27.88	-1.76
MacWEEK Composite*	290.82	3.34
SOFTWARE DEVELOPERS		
Adobe	38.75	13.14
Caere	9.00	22.03
CE Software	3.13	13.64
Graphsoft	5.00	2.56
Insignia	5.38	-5.49
Intuit	63.50	4.10
Macromedia	37.25	-3.25
Microsoft	98.88	5.05
Novell	14.38	8.49
Oracle	50.25	5.51
Symantec	13.88	10.45
STORAGE		
Conner	25.75	0.00
Iomega	14.38	-6.50
Maxtor	6.63	0.00
Pinnacle	12.50	-13.79
Quantum	18.50	2.78
Seagate	59.88	2.13
SyQuest	5.06	-34.68

	02.08.96 CLOSE	WEEKLY % CHANGE
PERIPHERALS VENDORS		
AmeriQuest	0.81	-7.14
Asanté	7.88	1.61
Focus	4.56	-2.67
Global Village	15.50	-2.36
HP	91.00	4.60
QMS	5.50	7.32
Radius	1.56	4.17
Shiva	75.75	6.50
Tektronix	45.38	-0.27
Truevision	5.56	8.54
DISTRIBUTORS		
CompUSA	35.88	-1.71
IE	6.13	36.11
Merisel	3.75	0.00
Tech Data	14.75	9.26
INDUSTRY INDICATORS		
Compaq	51.00	7.65
IBM	113.50	4.13
Intel	57.88	3.23
Motorola	56.88	1.34
SGI	29.13	3.10
NASDAQ	1093.17	2.22

**The MacWEEK Composite is calculated by adding the stock prices of the following companies: Apple, Adobe, Asanté, Caere, CE Software, Global Village, Intuit, Macromedia, Radius, Shiva, SyQuest and Truevision. Source: Nordby International Inc.*

On-line this week

ZDNet Opinion page gets a face lift

We're giving our Web site a make-over, starting with the Opinion page (http://www.zdnet.com/~macweek/opinion.html). The opinion archives are now organized by column name, making it easy to review the past few months' installments of MacInTouch or Mac the Knife.

MacUser debuts on-line columns

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We want to know the difficulties, successes and failures you've experienced in the areas below. Send your comments to solutions@macweek.com. Please include information on how to contact you.

- If you run a small business, what type of low-end e-mail packages are you using? Are they adequate or do you feel like something is missing?
- Photoshop users: Relate your experiences to MacWEEK regarding what techniques you have used for Photoshop acceleration.

REVIEWS IN THE WORKS

- Microspot's 3D World
- Farallon's Timbuktu Pro 2.0
- Data Description's Data Desk 5.0
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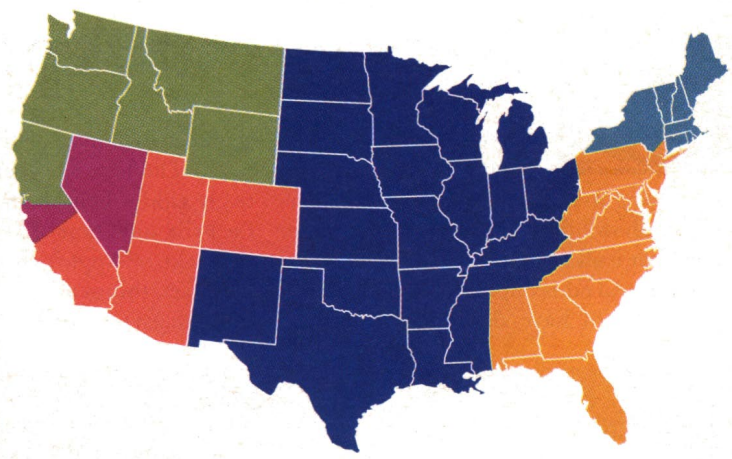

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New age at Apple: Bill ❤ Gil

Valentine's Day is just around the corner, and borrowing a page from the "Mary Tyler Moore Show," the Knife is ready to proclaim that "love is all around, no need to fake it."

Perennial odd couple Apple and Microsoft seem to have dŏffed their tam-o-shanters in honor of that worthy sentiment. The Knife's cyber-yentas are positively giddy about the new thaw between the Felix and Oscar of Mac development in the wake of Apple's change of command.

In fact, things are getting so warm and fuzzy that a team of Apple reps trekked up to Redmond last week to shore up relations. This big group hug is a far cry from days gone by, when Big Mike Spindler would regularly leave Bill Gates waiting by the phone.

And speaking of alternative living arrangements: Adobe is planning new digs for its Seattle operations. The company is still undecided about whether to lease, buy or build the facility, which will house technical support, customer service, engineering and some marketing by mid-'98. The Knife's sources in the society columns suggest some departments from Adobe's Mountain View, Calif., headquarters may also be invited up for the housewarming party.

Hallmark networking cards

At the risk of flogging the Valentine's Day metaphor black and blue, a couple of new cards are promising to bring people closer together. For starters, Apple is going to pledge its devotion to token ring with a PCI card that it will unveil Feb. 15. There are still problems in paradise, however: The card has a bus-timing problem that so far has caused irreconcilable differences with the Power Mac 7200. The Knife's networking trolls assure him that Apple intends to have the problem fixed by the time the card ships two weeks or so after the introduction.

Meanwhile, Motorola is putting the moves on portable ISDN with a line of PC Cards that will be on the market later this year.

On-line courtship

Fleshing out its long-term commitment to the Web as a full-blown multimedia environment, Apple is embracing the Internet and Netscape's Navigator as a means to promote its technologies. The Knife's drones predict that the company will whip out a pair of Navigator plug-ins that will let Internet jockeys view QuickDraw 3D documents and QuickTime movies on-line. The QuickDraw 3D plug-in is due to come out next week, while the QuickTime software will linger in Apple's corporate closet a while longer.

Apple is not the only developer dipping a finger into the Netscape pot. The Knife predicts that Now Software will be plugging its Up-to-Date scheduling software into the Web — in a timely fashion, of course.

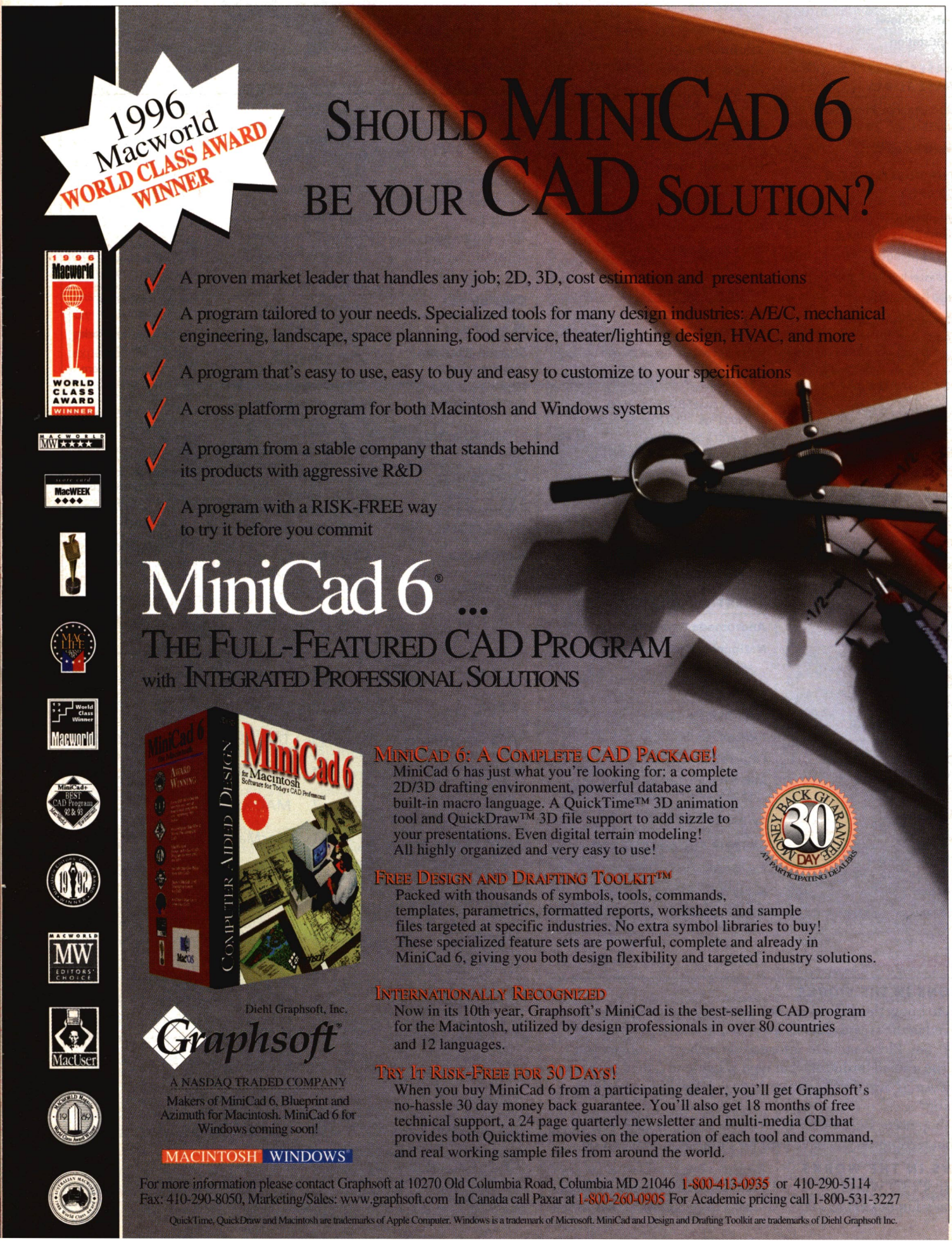
Drawn to the Mac

And speaking of timely: After years of flirting with the platform, Corel may finally be ready to put out a Mac version of CorelDraw, the company's behemoth PC drawing program. Now that the company has snatched up WordPerfect from the jaws of Novell, the moves to port CorelDraw may represent another hint of a Mac productivity suite in the works.

Wacom does Washington

The Clinton administration's romance with high tech took on a new form this week, when Bill (the wonk, not the geek) took digital pen in hand to sign the Telecommunications Bill. Clinton autographed one copy with a fountain pen, then signed an electronic version via a 12-by-12-inch Wacom tablet. Three pens were sent with the tablet, including a "fat" model that the First Lady may wish to use when billing her clients. □

Roses are red; violets are blue; you can get a cool mug for a Knife tip or two! Call (415) 243-3544; fax (415) 243-3651; mac_the_knife@macweek.com.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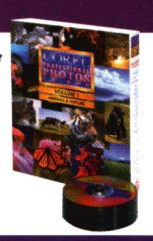

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